

Ref: 02425-05001-32002

December 5, 2005

Mr. Kevin Destruel  
Mead Clark Lumber Company  
P.O. Box 529  
Santa Rosa, CA 95402

**Re: Quarterly Groundwater Monitoring Report – Third Quarter 2005, Former Mead Clark Lumber Company, Third and Railroad Streets, Santa Rosa, California, NCRWQCB Case No. 1TSR016**

Dear Mr. Destruel:

This report presents the results of Winzler & Kelly Consulting Engineers' (Winzler & Kelly's) third quarter 2005 groundwater monitoring and sampling activities performed on August 10, 2005, at the Former Mead Clark Lumber Company located at Third and Railroad Streets, Santa Rosa, California (Figures 1 and 2). A summary of the status of the remedial measures at the site is also provided.

**GROUNDWATER MONITORING AND SAMPLING ACTIVITIES**

The Site-Specific Sampling Procedures, provided in Appendix A, describe in detail all of the monitoring and sampling activities that were performed at the site on August 10, 2005. A brief summary of these activities is also provided below.

**FIELD ACTIVITIES**

- Personnel Present:** On August 10, 2005, Blaine Tech Services (contracted by Winzler & Kelly) measured groundwater levels and purged the groundwater monitoring wells to be sampled. Winzler & Kelly personnel collected the groundwater samples.
- Depth-to-Groundwater:** An electronic water level meter was used to measure the depth-to-groundwater (DTW) in each monitoring well after allowing the groundwater in each well to equilibrate to atmospheric pressure for a minimum of 20 minutes. DTW was measured while the ozone/hydrogen peroxide system was operating.
- Dissolved Oxygen:** Following DTW measurements, a calibrated dissolved oxygen (DO) meter was used to measure the concentrations of DO in all the monitoring and extraction wells sampled.
- Purging:** Prior to sampling, each monitoring well was purged a minimum of three well casing volumes or until the wells dewatered.

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**Groundwater Sampling:** On August 10, 2005, groundwater samples were collected from monitoring wells GW-1, GW-2, GW-12, GW-13A, GW-16, GW-18, GW-31, GW-37, and dual-phase extraction (DPE) wells DPE-1, DPE-5, DPE-7, and DPE-9. New disposable bailers were used to collect and transfer all groundwater samples from monitoring and DPE wells into the appropriate laboratory-supplied, certified clean sample containers.

**Chemical Analysis:** Analytical Sciences Laboratory (Analytical Sciences) of Petaluma, California (a California-certified laboratory) analyzed each groundwater sample collected from the monitoring and DPE wells for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 8015M, and for benzene, toluene, ethyl benzene, and total xylenes (BTEX) and oxygenated fuel additives by EPA Method 8260B.

As part of the ozone remediation monitoring, groundwater samples were analyzed for hexavalent chromium by EPA Method 7196A, for bromate and bromide by EPA Method 300 (IC), and for molybdenum, selenium, and vanadium (metals) by EPA Method 6010 and 200.9.

### THIRD QUARTER 2005 GROUNDWATER MONITORING AND SAMPLING RESULTS

The groundwater elevation and flow direction data are presented in Tables 1 and 2. A groundwater contour map, provided as Figure 3, illustrates the general groundwater elevation contours and flow direction was toward the southwest at a calculated gradient of 0.03 ft/ft in the area of no ozone and air injection. As in Figure 3, the groundwater contours cannot be determined in the area of ozone and air injection because the groundwater in this area is aerated. When the groundwater is aerated, the density of groundwater decreases from 1.0 g/cm<sup>3</sup> to a density less than 1.0 g/cm<sup>3</sup>; therefore, the flow direction and gradient cannot be calculated accurately in the area of injection. The groundwater elevation anomaly is not mounding, but is a result of less dense groundwater produced by intermittent ozone and air injection.

Prior to purging, DO concentrations were measured in each well. Concentration results are summarized on Table 3. Concentrations ranged from 0.1 to 3.0 mg/L. DO concentrations are relatively low during this sampling event given the operation of the remedial system. DO concentrations will be monitored for an increase during the next sampling event.

During purging activities, the parameters of pH, conductivity, temperature, and turbidity were monitored in the groundwater extracted from the wells. A summary of these indicator parameters is provided in Table 3. Oxidation-reduction potential (ORP) was not monitored during this sampling event, because Blaine Tech Services failed to collect the measurements. ORP will be monitored during the next quarterly sampling event.

Analytical results are summarized on Table 5. Groundwater samples collected on August 10, 2005, show a general decrease in TPH-G concentrations in all the monitoring wells compared to previous TPH-G concentrations at similar time of the year. Consistent with previous monitoring, the highest concentrations of constituents of concern (COCs) were detected in the groundwater samples collected

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from monitoring wells located in the southwest portion of the site. The groundwater samples collected from monitoring wells located upgradient of this area continue to be free of COCs. A comprehensive summary of the analytical results of groundwater sampling is provided in Table 4. Figure 4 depicts the concentrations of TPH-G, benzene, and methyl tert-butyl ether (MTBE) that was detected in the groundwater samples collected on August 10, 2005.

Groundwater samples collected from monitoring well GW-2, and DPE wells DPE-1, DPE-5, DPE-7, and DPE-9 were analyzed for ozone oxidation/degradation byproduct related constituents (hexavalent chromium, bromate, molybdenum, selenium, and vanadium). Analytical results did not quantify any of the above-mentioned constituents above the laboratory's reportable detection limits (RDLs). Bromide was detected in all the wells sampled. Bromide (a reduced form) is commonly found in groundwater, while bromate is an oxidized form of bromide that can be found in association with the ozonation process. The ozone is not expected to begin significant oxidation of bromide until oxidation of petroleum hydrocarbons is subsequently completed. The oxidation of bromide is said to be insignificant as long as oxidizable petroleum hydrocarbon concentrations are above 500 µg/L (Source: Joan Brackin of T.A.O. Technologies, Inc.).

The laboratory QA/QC included the use of method blanks to exclude false-positive analyses and the use of laboratory control samples to evaluate the percentage recovery of known analyte spikes. The recovery percentages for all of the sample analytes were within the laboratory's acceptance ranges. The complete laboratory report, QA/QC data, and the chain-of-custody form are included in Appendix B.

#### **GEOTRACKER DATA ENTRY**

As required by Assembly Bill AB2886, Winzler & Kelly has submitted the remedial system installation report, the second quarter 2005 groundwater monitoring report, and the August 10, 2005 groundwater well measurement file to the GeoTracker database. Upload verification forms are provided in Appendix C. Winzler & Kelly will submit the analytical data upon receipt and submit this report upon completion.

#### **STATUS OF REMEDIAL MEASURES**

On June 2 and 3, 2005, the ozone/hydrogen peroxide system unit was installed and operation initiated. Winzler & Kelly prepared and submitted the *Remedial System Installation and Start-Up Report* dated August 15, 2005. Sparge points SP-3 and SP-5 through SP-11 are currently in operation with the site-wide cumulative ozone injection rate set at 1.6 pounds of ozone per day.

On July 19, 2005, the injection of 7% hydrogen peroxide solution was initiated in operational sparge points (SP-3 and SP-5 through SP-11). The hydrogen peroxide injection is programmed to run for 80 minutes (10 minutes per sparge point) every 360 minutes (6 hours) and is then followed by ozone (80 minutes), which also injects 10 minutes per sparge point and air (5 minutes) injections. The hydrogen peroxide pump injects approximately 3.8 gallons of hydrogen peroxide solution per sparge point per day.

The ozone/hydrogen peroxide system has been operating as designed for approximately 127 days as of October 20, 2005, which is 91% operational since the start-up on June 3, 2005. A table of the operational hours is provided in Appendix D. A summary of the approximate mass of oxidants (agent

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which degrades petroleum hydrocarbons by oxidation) injected into each sparge point as of October 20, 2005 is provided below.

Oxidants	Injection Totals per Sparge Point	Total Injected at the Site
Ozone	25.4 pounds	203 pounds
Hydrogen Peroxide*	2.2 pounds	17.6 pounds

\*Note: Hydrogen Peroxide reported as 100%.

Approximately 220.6 pounds of oxidants was injected at the site as of October 20, 2005, which provides the potential degradation of approximately 73.5 pounds of dissolved petroleum hydrocarbons based on a 3:1 oxidant to contaminant demand ratio (Source: Joan Brackin of T.A.O. Technologies, Inc.).

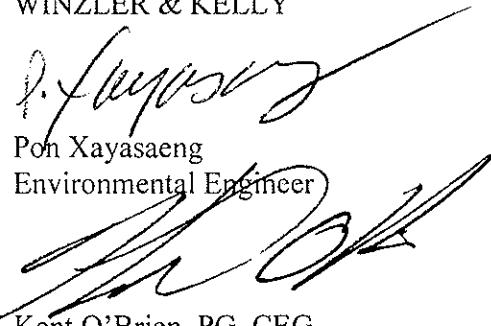
#### UPCOMING SITE ACTIVITIES

Winzler & Kelly will continue to perform quarterly groundwater monitoring and sampling activities at the site. The next groundwater sampling event (fourth quarter 2005) is scheduled for November 2005. Evaluations and concentration trends will be included in the fourth quarter 2005 quarterly monitoring and sampling report.

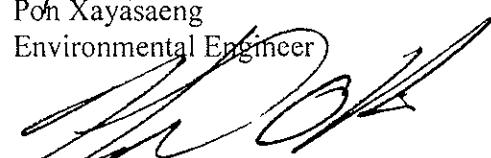
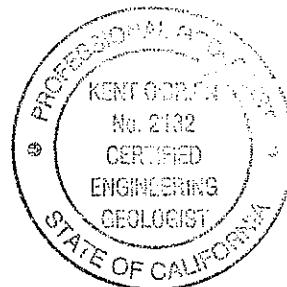
If you have any questions or comments regarding this project, please contact David J. Vossler, Project Manager, at (707) 523-1010.

Sincerely,

WINZLER & KELLY

  
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Environmental Engineer

  
Kent O'Brien, PG, CEG  
Senior Project Geologist

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Attachments

#### Figures:

Figure 1 – Location Map

Figure 2 – Site Map

Figure 3 – Groundwater Contour Map

Figure 4 – Petroleum Hydrocarbon Concentrations in Groundwater

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Tables:

- Table 1 – Water Level Data and Well Construction Details
- Table 2 – Groundwater Gradient and Flow Direction
- Table 3 – D.O., Nitrate, and Indicator Parameters
- Table 4 – Groundwater Sample Analyses Results
- Table 5 – Additional Groundwater Analytical Results

Appendices:

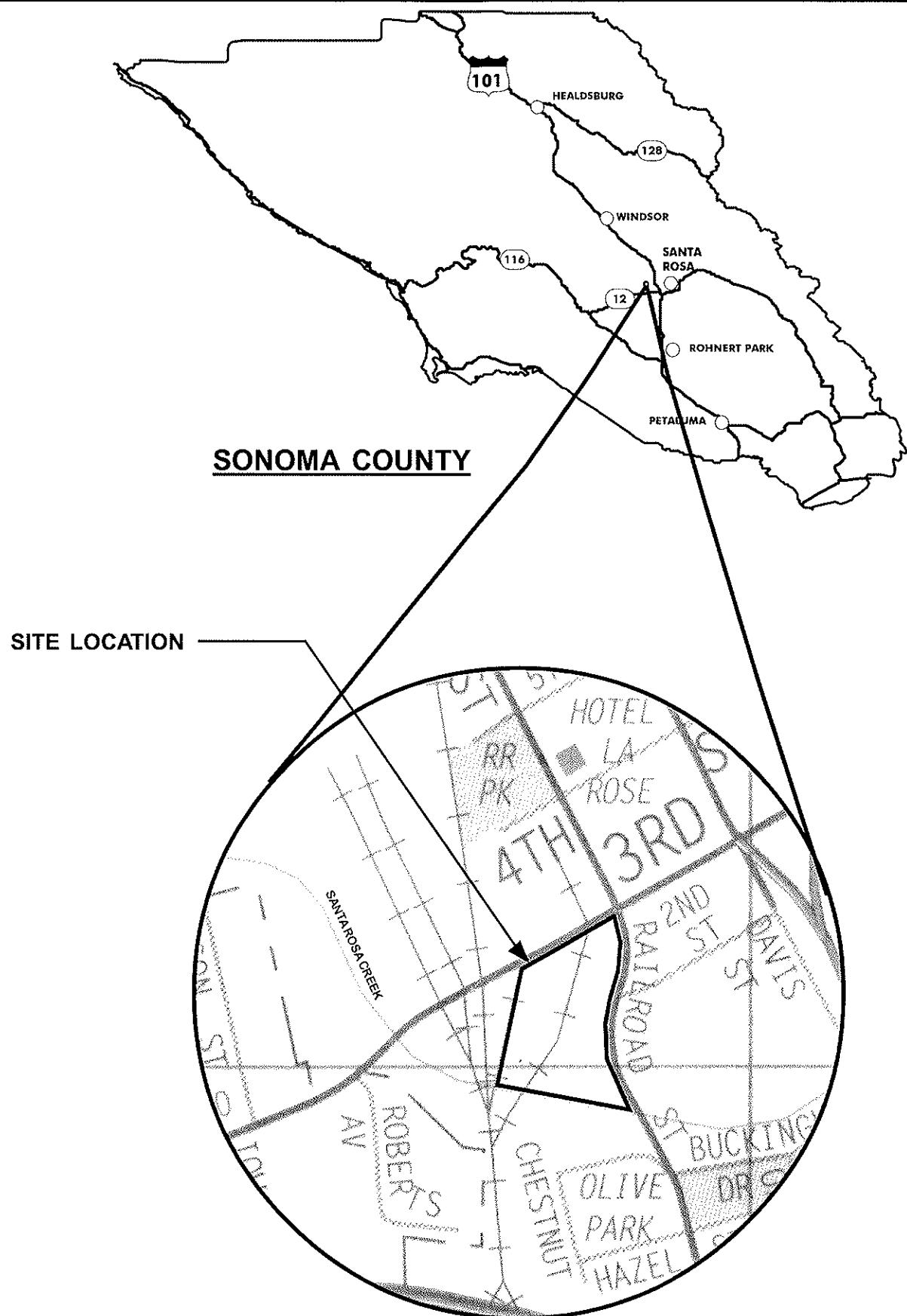
- Appendix A – Site-Specific Sampling Procedures
- Appendix B – Analytical Laboratory Report
- Appendix C – GeoTracker Upload Verifications
- Appendix D – Operation and Maintenance Data

- c: Ms. Joan Fleck, North Coast Regional Water Quality Control Board, 5550 Skylane Boulevard,  
Suite A, Santa Rosa, CA 95403
- Mr. Paul Fitzpatrick, Law Offices of Clement, Fitzpatrick & Kenworthy, 3333 Mendocino  
Avenue, Santa Rosa, CA 95401

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## **Figures**



LOCATION MAP  
FORMER MEAD CLARK LUMBER COMPANY  
THIRD & RAILROAD STREETS  
SANTA ROSA, CA

FIGURE 1

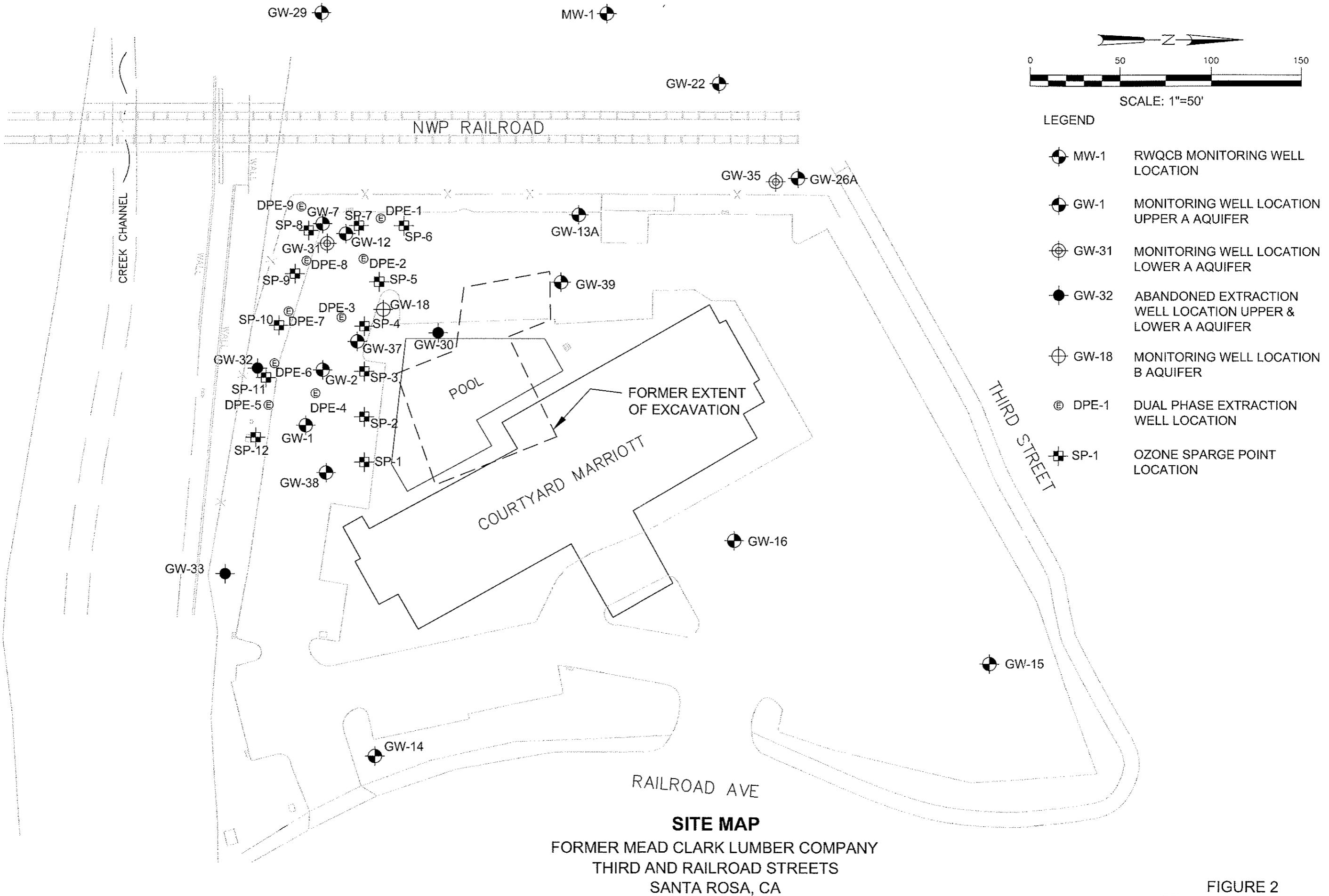


FIGURE 2

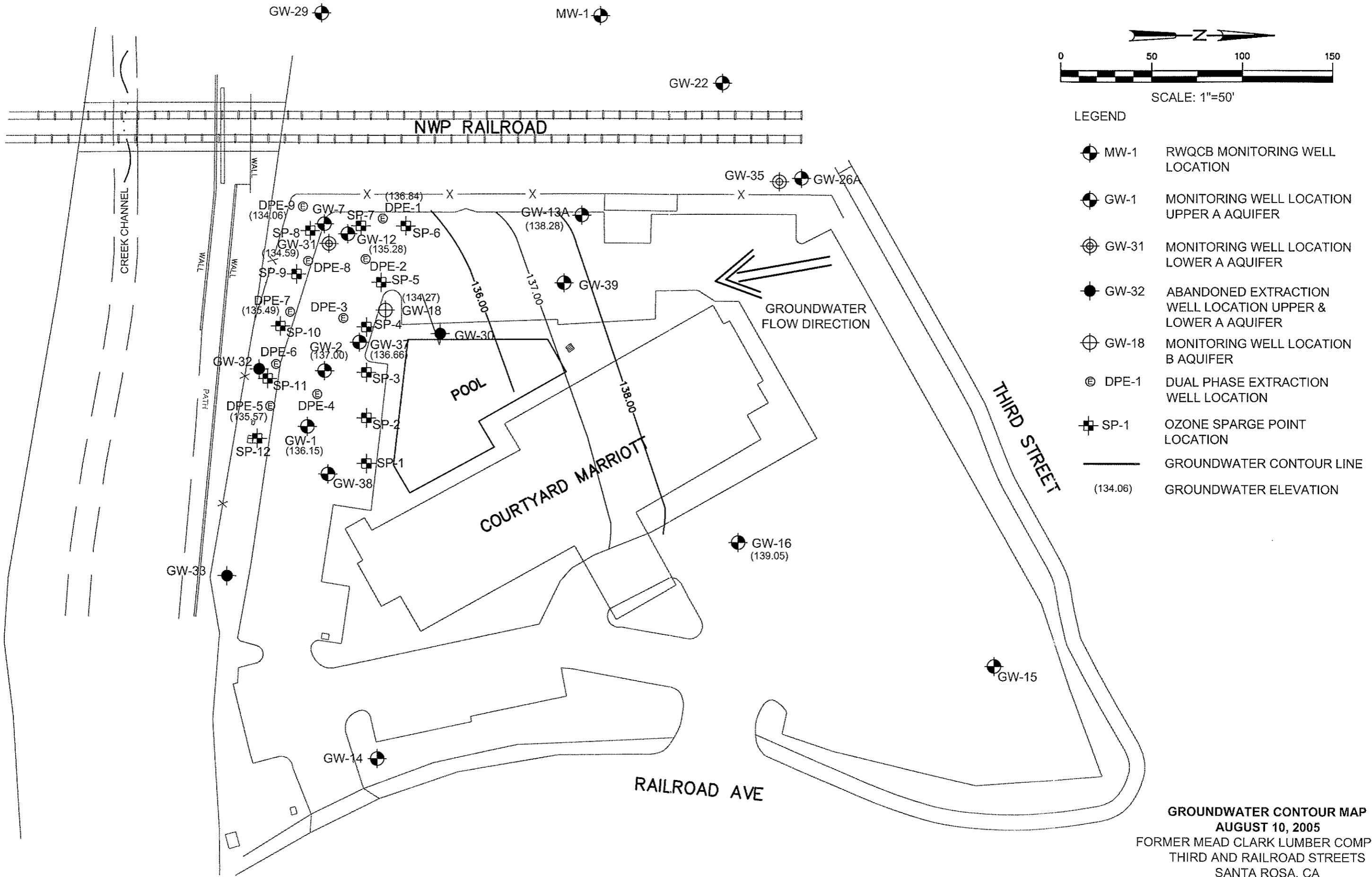
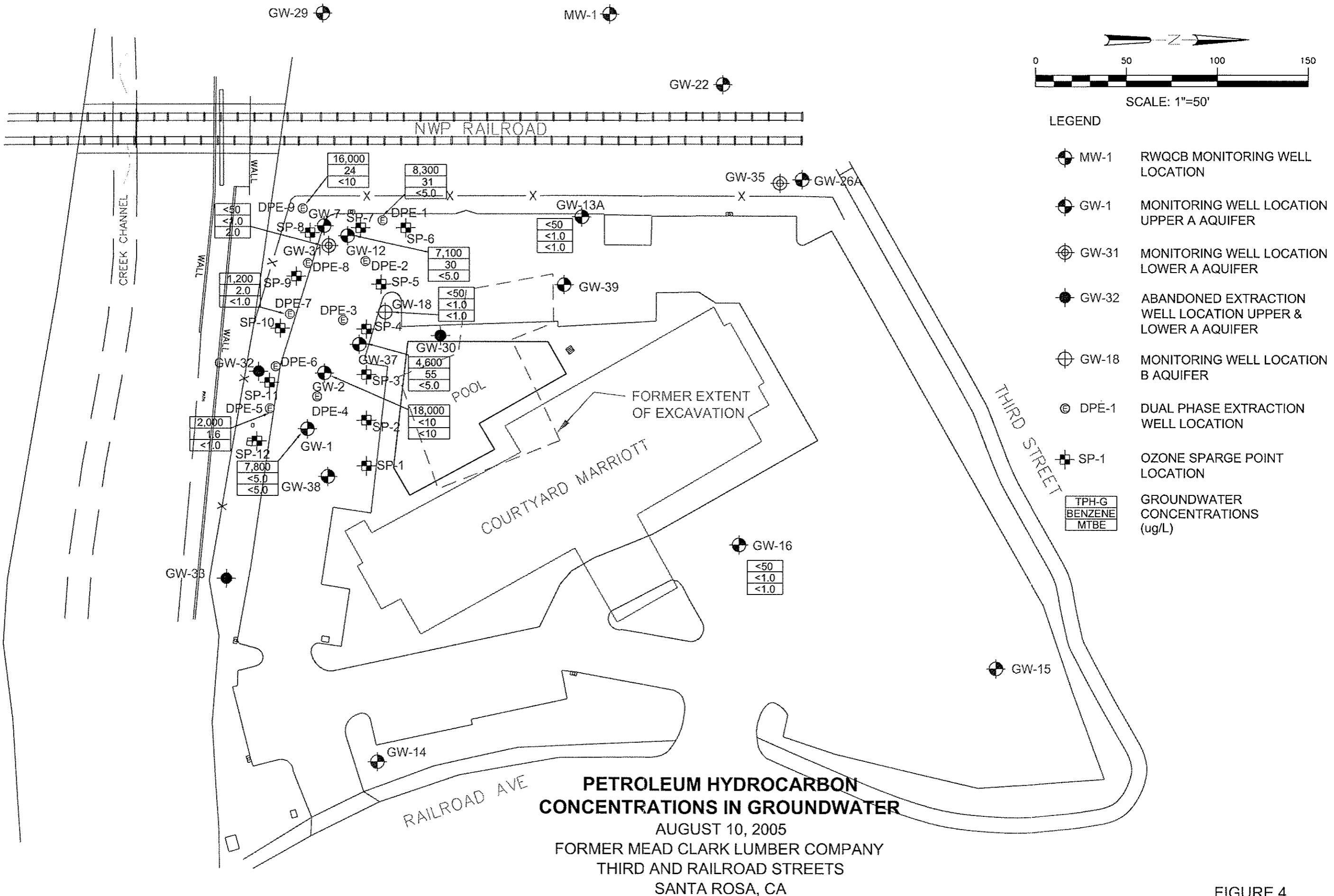


FIGURE 3



## FIGURE 4

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## **Tables**

**Table 1. Water Level Data and Well Construction Details**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
								feet
GW-1 Upper-A	7/25/2001	133.62	20.67	154.29	NM	11.75-31.75	9.75-32.0	0.0-9.75
	10/29/2001	132.99	21.30		NM			
	1/30/2002	137.58	16.71		NM			
	4/29/2002	135.67	18.62		<b>Sheen<sup>1</sup></b>			
	7/30/2002	134.50	19.79		<b>0.01</b>			
	10/28/2002	135.73	18.56		ND			
	1/28/2003	137.85	16.44		<b>Sheen<sup>1</sup></b>			
	4/29/2003	137.30	16.99		<b>Sheen</b>			
	8/7/2003	135.44	18.85		<b>Droplets<sup>1</sup></b>			
	11/3/2003	134.08	20.21		<b>Droplets<sup>1</sup></b>			
	1/27/2004	136.90	17.39		<b>Droplets<sup>1</sup></b>			
	5/28/2004	136.19	18.10		<b>Sheen<sup>1</sup></b>			
	5/10/2005	137.80	16.49		ND			
	8/10/2005	136.15	18.14		NM			
GW-2 Upper-A	7/25/2001	135.10	19.24	154.34	NM	11.75-31.75	9.75-32.0	0.0-9.75
	10/29/2001	134.21	20.13		NM			
	1/30/2002	138.52	15.82		NM			
	4/29/2002	137.11	17.23		<b>Sheen<sup>1</sup></b>			
	7/30/2002	135.88	18.46		<b>0.01</b>			
	10/28/2002	137.13	17.21		<b>Sheen</b>			
	1/28/2003	138.63	15.71		<b>Sheen<sup>1</sup></b>			
	4/29/2003	137.93	16.41		<b>Sheen</b>			
	8/7/2003	136.92	17.42		<b>Droplets<sup>1</sup></b>			
	11/3/2003	135.04	19.30		<b>Droplets<sup>1</sup></b>			
	1/27/2004	137.89	16.45		<b>Droplets<sup>1</sup></b>			
	5/28/2004	137.04	17.30		<b>Sheen<sup>1</sup></b>			
	5/10/2005	138.34	16.00		<b>Sheen<sup>1</sup></b>			
	8/10/2005	137.00	17.34		NM			
GW-7 Upper-A	7/25/2001	NA	NA	153.65	NM	9.5-31.5	7.5-32.0	0.0-7.5
	10/29/2001	132.27	21.16		<b>0.28</b>			
	1/30/2002	137.83	15.82		<b>Sheen<sup>2</sup></b>			
	4/29/2002	135.18	18.47		<b>Sheen<sup>2</sup></b>			
	7/30/2002	133.63	20.02		<b>Sheen<sup>2</sup></b>			
	10/28/2002	134.98	18.67		<b>Sheen<sup>2</sup></b>			
	1/28/2003	138.22	15.43		<b>Sheen<sup>1,2</sup></b>			
	4/29/2003	137.13	16.52		<b>Sheen</b>			
	8/7/2003	134.70	18.95		ND			
	11/3/2003	133.51	20.14		ND			
	1/27/2004	137.18	16.47		ND			
	5/28/2004	134.90	18.75		ND			
	5/10/2005	138.41	15.24		NM			
GW-12 Upper-A	7/25/2001	133.46	18.47	151.93	<b>0.01</b>	8.0-38.0	4.0-38.0	0.0-4.0
	10/29/2001	132.77	19.16		<b>0.01</b>			
	1/30/2002	138.21	13.72		<b>Sheen<sup>2</sup></b>			
	4/29/2002	135.47	16.46		<b>Sheen<sup>2</sup></b>			
	7/30/2002	133.74	18.19		<b>Sheen<sup>2</sup></b>			
	10/28/2002	135.08	16.85		<b>Sheen<sup>2</sup></b>			
	1/28/2003	138.52	13.41		<b>Sheen<sup>1,2</sup></b>			
	4/29/2003	137.40	14.53		<b>Sheen</b>			
	8/7/2003	134.82	17.11		ND			
	11/3/2003	133.43	18.50		ND			
	1/27/2004	137.37	14.56		ND			
	5/28/2004	135.15	16.78		ND			
	5/10/2005	138.63	13.30		NM			
	8/10/2005	135.28	16.65		NM			

**Table 1. Water Level Data and Well Construction Details**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
								feet
GW-13A Upper-A	7/25/2001	137.47	16.30	153.77	NM	6.8-21.8	5.0-23.1	0.0-5.0
	10/29/2001	136.88	16.89		NM			
	1/30/2002	140.17	13.60		NM			
	4/29/2002	138.84	14.93		NM			
	7/30/2002	137.57	16.20		NM			
	10/28/2002	138.36	15.41		NM			
	1/28/2003	140.31	13.46		NM			
	4/29/2003	139.93	13.84		NM			
	8/7/2003	138.23	15.54		NM			
	11/3/2003	136.67	17.10		NM			
	1/27/2004	140.04	13.73		NM			
	5/28/2004	138.61	15.16		NM			
	5/10/2005	140.54	13.23		NM			
	8/10/2005	138.28	15.49		NM			
GW-14 Upper-A	7/25/2001	134.55	20.42	154.97	NM	9.4-35.4	8-29.0	0.0-8.0
	10/29/2001	134.02	20.95		NM			
	1/30/2002	138.97	16.00		NM			
	4/29/2002	136.72	18.25		NM			
	7/30/2002	135.62	19.35		NM			
	10/28/2002	136.67	18.30		NM			
	1/28/2003	139.42	15.55		NM			
	4/29/2003	138.23	16.74		NM			
	8/7/2003	136.62	18.35		NM			
	11/3/2003	134.88	20.09		NM			
	1/27/2004	137.81	17.16		NM			
	5/28/2004	137.03	17.94		NM			
	5/10/2005	139.35	15.62		NM			
GW-15 Upper-A	7/25/2001	139.99	13.43	153.42	NM	8.3-31.3	7.0-32.5	0.0-7.0
	10/29/2001	139.22	14.20		NM			
	1/30/2002	142.74	10.68		NM			
	4/29/2002	140.95	12.47		NM			
	7/30/2002	140.04	13.38		NM			
	10/28/2002	140.39	13.03		NM			
	1/28/2003	143.04	10.38		NM			
	4/29/2003	141.61	11.81		NM			
	8/7/2003	140.48	12.94		NM			
	11/3/2003	139.12	14.30		NM			
	1/27/2004	142.32	11.10		NM			
	5/28/2004	140.73	12.69		NM			
	5/10/2005	142.28	11.14		NM			
GW-16 Upper-A	7/25/2001	138.14	16.71	154.85	NM	7.3-25.3	6.5-27.5	0.0-6.5
	10/29/2001	137.44	17.41		NM			
	1/30/2002	141.55	13.30		NM			
	4/29/2002	139.31	15.54		NM			
	7/30/2002	138.22	16.63		NM			
	10/28/2002	138.95	15.90		NM			
	1/28/2003	141.82	13.03		NM			
	4/29/2003	140.40	14.45		NM			
	8/7/2003	138.75	16.10		NM			
	11/3/2003	137.24	17.61		NM			
	1/27/2004	141.06	13.79		NM			
	5/28/2004	139.30	15.55		NM			
	5/10/2005	141.37	13.48		NM			
	8/10/2005	139.05	15.80		NM			

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Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
								feet
GW-18 B-Aquifer	7/25/2001	132.58	22.69	155.27	NM	69.0-86.0	67.0-89.0	0.0-67.0
	10/29/2001	131.40	23.87		NM			
	1/30/2002	138.10	17.17		NM			
	4/29/2002	135.73	19.54		NM			
	7/30/2002	132.92	22.35		NM			
	10/28/2002	131.58	23.69		NM			
	1/28/2003	138.84	16.43		NM			
	4/29/2003	137.41	17.86		NM			
	8/7/2003	133.73	21.54		NM			
	11/3/2003	132.20	23.07		NM			
	1/27/2004	137.67	17.60		NM			
	5/28/2004	134.67	20.60		NM			
	5/10/2005	137.96	17.31		NM			
	8/10/2005	134.27	21.00		NM			
GW-19 Upper-A	7/25/2001	130.78	21.97	152.75	NM	7.5-32.5	6.5-33.5	0.0-6.5
	10/29/2001	NM	NM		NM			
	1/30/2002	NM	NM		NM			
	4/29/2002	132.45	20.30		NM			
	7/30/2002 - 5/28/2004	NM	NM		NM			
GW-26A Upper-A	7/25/2001	NA	NA	154.27	NM	10.0-30.0	9.0-31.0	0.0-9.0
	10/29/2001	136.70	17.57		NM			
	1/30/2002 - 5/28/2004	NM	NM		NM			
GW-31 Lower-A	7/25/2001	132.79	21.00	153.79	NM	44.0-52.0	43.0-52.0	0.0-43.0
	10/29/2001	132.13	21.66		ND			
	1/30/2002	137.09	16.70		NM			
	4/29/2002	135.32	18.47		NM			
	7/30/2002	133.50	20.29		NM			
	10/28/2002	132.78	21.01		NM			
	1/28/2003	137.81	15.98		NM			
	4/29/2003	136.47	17.32		NM			
	8/7/2003	134.08	19.71		ND			
	11/3/2003	133.11	20.68		NM			
	1/27/2004	136.61	17.18		NM			
	5/28/2004	134.71	19.08		NM			
	5/10/2005	137.16	16.63		ND			
	8/10/2005	134.59	19.20		NM			
GW-37 Upper-A	7/25/2001	134.71	20.08	154.79	NM	8.5-33.5	9.5-36.5	0.0-9.5
	10/29/2001	134.05	20.74		ND			
	1/30/2002	138.50	16.29		NM			
	4/29/2002	136.50	18.29		NM			
	7/30/2002	135.14	19.65		NM			
	10/28/2002	136.61	18.18		ND			
	1/28/2003	138.70	16.09		ND			
	4/29/2003	137.86	16.93		NM			
	8/7/2003	136.64	18.15		ND			
	11/3/2003	134.92	19.87		NM			
	1/27/2004	137.98	16.81		NM			
	5/28/2004	136.48	18.31		NM			
	5/10/2005	138.34	16.45		NM			
	8/10/2005	136.66	18.13		NM			

**Table 1. Water Level Data and Well Construction Details**

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Third and Railroad Streets, Santa Rosa, California

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
								feet
GW-38 Upper-A	7/25/2001	135.17	19.87	155.04	NM	8.0-37.0	9.0-39.5	0.0-9.0
	10/29/2001	134.45	20.59		NM			
	1/30/2002	138.89	16.15		NM			
	4/29/2002	137.13	17.91		NM			
	7/30/2002	135.89	19.15		NM			
	10/28/2002	137.04	18.00		NM			
	1/28/2003	139.29	15.75		NM			
	4/29/2003	138.52	16.52		NM			
	8/7/2003	136.89	18.15		NM			
	11/3/2003	135.06	19.98		NM			
	1/27/2004	138.38	16.66		NM			
	5/28/2004	137.17	17.87		NM			
	5/10/2005	139.04	16.00		NM			
GW-39 Upper-A	7/25/2001	137.55	17.34	154.89	NM	7.5-27.5	7.0-31.5	0.0-7.0
	10/29/2001	136.94	17.95		ND			
	1/30/2002	140.35	14.54		NM			
	4/29/2002	138.92	15.97		NM			
	7/30/2002	137.53	17.36		NM			
	10/28/2002	138.39	16.50		NM			
	1/28/2003	140.49	14.40		NM			
	4/29/2003	139.98	14.91		NM			
	8/7/2003	138.21	16.68		NM			
	11/3/2003	136.70	18.19		NM			
	1/27/2004	140.14	14.75		NM			
	5/28/2004	138.69	16.20		NM			
	5/10/2005	140.68	14.21		NM			
DPE-1	9/8/2003	131.76	22.00	153.76	ND	16-26.0	14.0-26.0	0-12.0
	11/3/2003	134.93	18.83		ND			
	1/27/2004	139.03	14.73		NM			
	5/28/2004	137.56	16.20		NM			
	5/10/2005	139.80	13.96		NM			
	8/10/2005	136.84	16.92		NM			
DPE-2	9/8/2003	NM	NM	154.03	ND	16.0-20.0	14.0-26.0	0-12.0
	11/3/2003	NM	NM		NM			
	1/27/2004	138.43	15.60		NM			
	5/28/2004	136.81	17.22		NM			
	5/10/2005	139.35	14.68		NM			
DPE-3	9/10/2003	134.99	19.50	154.49	ND	14.0-24.0	13.5-24.0	0-13.5
	11/3/2003	134.56	19.93		ND			
	1/27/2004	137.70	16.79		NM			
	5/28/2004	136.15	18.34		NM			
	5/10/2005	138.15	16.34		NM			
DPE-4	9/10/2003	134.92	20.00	154.92	ND	15-25.0	14.5-25.0	0-14.5
	11/3/2003 - 5/28/2004	NM	NM		NM			
	5/10/2005	138.21	16.71		NM			
DPE-5	9/10/2003	132.46	22.50	154.96	ND	15.0-25.0	14.5-25.0	0-14.5
	11/3/2003	NM	NM		NM			
	1/27/2004	135.66	19.30		NM			
	5/28/2004	135.32	19.64		NM			
	5/10/2005	136.77	18.19		NM			
	8/10/2005	135.57	19.39		NM			

**Table 1. Water Level Data and Well Construction Details**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Date	Groundwater Elevation	Depth-to-Water	Top of Casing Elevation (Mean Sea Level)	Free Product Thickness	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
								feet
DPE-6	9/10/2003	133.89	21.00	154.89	ND	15.0-25.0	14.5-25.0	0-14.5
	11/3/2003	NM	NM		NM			
	1/27/2004	135.71	19.18		NM			
	5/28/2004	135.38	19.51		NM			
	5/10/2005	136.84	18.05		NM			
DPE-7	9/9/2003	134.49	20.00	154.49	ND	14.0-24.0	13.0-24.5	0-13.0
	11/3/2003 - 5/28/2004	NM	NM		NM			
	5/10/2005	137.64	16.85		NM			
	8/10/2005	135.49	19.00		NM			
DPE-8	9/9/2003	134.30	20.00	154.30	ND	14.0-24.0	13.0-24.0	0-13.0
	11/3/2003 - 5/28/2004	NM	NM		NM			
	5/10/2005	137.60	16.70		NM			
DPE-9	9/9/2003	133.71	20.50	154.21	ND	14.0-24.0	13.0-24.0	0-13.0
	11/3/2003	133.52	20.69		ND			
	1/27/2004	136.13	18.08		ND			
	5/28/2004	134.38	19.83		<b>0.13 feet</b>			
	5/10/2005	137.18	17.03		ND			
	8/10/2005	134.06	20.15		NM			

**Notes:**

NM = Not Measured

ND = Non Detect

<sup>1</sup> = Observed after purging of monitoring well.<sup>2</sup> = Product-absorbent sock temporarily removed from well to collect depth-to-water measurements.

--- = Well not surveyed

Top of Casing Elevations Surveyed by Winzler & Kelly on September 24, 2001. Elevations based on National Geodetic Survey Bench Mark U 106, located at the Santa Rosa Northwestern Pacific Railroad Station, with an elevation of 157.30 (NGVD 29) above mean sea level.

**Table 2. Groundwater Gradient and Flow Direction**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

<b>Date</b>	<b>Groundwater Gradient (ft/ft)</b>	<b>Flow Direction</b>	<b>Wells Used for Calculating Gradient and Flow Direction of the Upper-A Aquifer</b>
7/25/2001	0.01 to 0.03	South to Southeast	GW-1, GW-2, GW-12 through GW-16, GW-37, & GW-37 through GW-39
10/29/2001	0.01 to 0.03	South to Southeast	GW-1, GW-2, GW-12 through GW-16, GW-26, GW-37, & GW-37 through GW-39
1/30/2002	0.01 to 0.02	South to Southwest	GW-1, GW-2, GW-12 through GW-16, GW-37, & GW-37 through GW-39
4/29/2002	0.01 to 0.02	South to Southeast	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39
7/30/2002	0.01 to 0.03	Southeast	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39
10/28/2002	0.01	South	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39
1/28/2003	0.01	South	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39
4/29/2003	0.01	South	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39
8/7/2003	0.01	South	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39
11/3/2003	0.01	South	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39, DPE-1, 3, & 9
1/27/2004	0.02	South	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39, DPE-1, 2, 3, 5, 6 & 9
5/28/2004	0.01	South	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-37 through GW-39, DPE-1, 2, 3, 5, 6 & 9
5/10/2005	0.02	Southwest	GW-1, GW-2, GW-7, GW-12 through GW-16, GW-31, GW-37 through GW-39, DPE-1 through DPE- 9
8/10/2005	0.03	Southwest	GW-1, GW-2, GW-12, GW-13A, GW-16, GW-18, GW-31, GW-37, DPE-1, DPE-5, DPE-7, and DPE- 9

**Table 3. D.O., Nitrate, and Indicator Parameters**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Sample Date	DO (mg/L)	Nitrates (mg/L)	pH	Conductivity (uS/cm)	Turbidity (NTU)	Temperature (°F)	ORP (mV)
GW-1	10/28/2002	NA	NA	7.0	640	714	70.5	NA
	1/28/2003 <sup>a</sup>	NA	NA	6.6	691	177	70.7	NA
	4/29/2003				Not Sampled			
	8/7/2003	NA	NA	7.4	684	141	72.3	NA
	11/3/2003	NA	NA	6.5	717	556	67.8	NA
	1/27/2004	NA	NA	6.5	727	46	68.8	NA
	5/28/2004	NA	NA	6.7	642	226	70.3	61
	5/10/2005	0.3	NA	7.0	668	126	70.0	-100
	8/10/2005	0.4	NA	6.6	665	>1000	68.7	NA
GW-2	1/28/2003 <sup>a</sup>	NA	NA	6.3	686	19	69.4	NA
	4/29/2003				Not Sampled			
	8/7/2003	NA	NA	7.3	651	68	71.8	NA
	11/3/2003	NA	NA	6.7	713	71,000	67.9	NA
	1/27/2004	NA	NA	6.5	709	127	68.0	NA
	5/28/2004	NA	NA	6.7	641	108	69.5	80
	5/10/2005	0.4	NA	6.9	651	21	69.2	-125
	8/10/2005	0.5	NA	6.6	655	>1000	69.6	NA
GW-7	1/28/2003	NA	NA	6.1	831	225	67.0	NA
	4/29/2003 <sup>b</sup>	NA	<0.50	NA	NA	NA	NA	NA
	8/7/2003	NA	NA	6.7	961	158	68.3	NA
	11/3/2003	NA	NA	6.5	970	222	66.3	NA
	1/27/2004	NA	NA	6.2	837	175	66.8	NA
	5/28/2004				Not Sampled			
	5/10/2005	0.4	NA	6.4	526	21	66.7	-93
GW-12	1/28/2003 <sup>a</sup>	NA	NA	6.4	939	113	69.5	NA
	4/29/2003				Not Sampled			
	8/7/2003	NA	NA	6.7	947	22	69.6	NA
	11/3/2003	NA	NA	6.4	1048	118	66.4	NA
	1/27/2004	NA	NA	6.4	930	65	68.6	NA
	5/28/2004	2.4	<0.10	6.6	902	50	70.2	48
	5/10/2005	0.4	NA	7.0	955	10	69.4	-115
	8/10/2005	0.3	NA	6.8	924	34	68.1	NA
GW-13A	7/30/2002	0.19	NA	6.8	670	55	68.6	NA
	10/28/2002	NA	NA	6.9	659	23	69.2	NA
	1/28/2003	NA	NA	6.5	665	9	67.6	NA
	4/29/2003	NA	NA	6.6	669	7	66.7	NA
	8/7/2003	NA	NA	6.7	682	31	67.7	NA
	11/3/2003				Not Sampled			
	1/27/2004				Not Sampled			
	5/28/2004	3.2	<0.10	6.6	654	8	67.8	113
	5/10/2005	0.6	NA	6.7	624	11	66.6	20
	8/10/2005	0.4	NA	6.6	629	11	67.0	NA
GW-14	7/30/2002	0.23	NA	6.2	664	43	64.7	NA
	10/28/2002	NA	NA	6.6	611	10	66.2	NA
	1/28/2003	NA	NA	6.5	689	11	65.0	NA
	4/29/2003	NA	NA	6.3	641	18	61.4	NA
	8/7/2003	NA	NA	6.7	680	19	65.8	NA
	11/3/2003				Not Sampled			
	1/27/2004	NA	NA	6.5	736	16	65.9	NA
	5/28/2004				Not Sampled			
	5/10/2005	0.2	NA	6.4	674	10	65.0	121

**Table 3. D.O., Nitrate, and Indicator Parameters**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Sample Date	DO (mg/L)	Nitrates (mg/L)	pH	Conductivity (uS/cm)	Turbidity (NTU)	Temperature (°F)	ORP (mV)
GW-15	7/30/2002	0.35	<5	6.8	639	3	69.5	NA
	10/28/2002	NA	NA	7.3	604	1	68.5	NA
	1/28/2003	NA	NA	6.4	642	7	66.7	NA
	4/29/2003	NA	NA	7.2	690	23	62.1	NA
	8/7/2003	NA	NA	7.2	639	4	70.3	NA
	11/3/2003				Not Sampled			
	1/27/2004	NA	NA	6.6	616	15	66.3	NA
	5/28/2004				Not Sampled			
	5/10/2005	1.8	NA	7.0	599	103	64.3	128
GW-16	7/30/2002	NA	NA	6.7	603	51	68.2	NA
	10/28/2002	NA	NA	7.1	579	24	68.6	NA
	1/28/2003	NA	NA	6.3	640	60	67.5	NA
	4/29/2003	NA	1.6	6.7	628	46	66.5	NA
	8/7/2003	NA	NA	6.7	631	18	69.5	NA
	11/3/2003				Not Sampled			
	1/27/2004				Not Sampled			
	5/28/2004	3.3	2.5	6.6	654	21	69.0	137
	5/10/2005	0.4	NA	6.6	661	24	67.7	145
	8/10/2005	0.2	NA	6.4	629	21	67.4	NA
GW-18	7/30/2002	NA	NA	7.7	521	4	67.7	NA
	10/28/2002	NA	NA	7.3	515	2	67.1	NA
	1/28/2003	NA	NA	7.6	554	1	65.4	NA
	4/29/2003	NA	NA	7.2	534	2	66.8	NA
	8/7/2003	NA	NA	7.3	548	4	68.0	NA
	11/3/03 -				Not Sampled			
	5/10/2005	0.6	NA	7.4	524	10	65.8	13
	8/10/2005	0.4	NA	7.2	524	13	66.2	NA
GW-31	7/30/2002	NA	NA	7.4	674	28	68.2	NA
	10/28/2002	NA	NA	7.1	708	31	69.2	NA
	1/28/2003	NA	NA	7.3	799	6	68.4	NA
	4/29/2003	NA	NA	7.3	676	48	65.8	NA
	8/7/2003	NA	NA	7.3	677	462	70.2	NA
	11/3/03 -				Not Sampled			
	5/10/2005	1.0	NA	7.4	739	14	67.0	50
	8/10/2005	3.0	NA	7.6	749	14	67.4	NA
GW-37	7/30/2002	0.18	<5	6.7	954	607	69.1	NA
	10/28/2002	NA	NA	6.9	941	883	70.0	NA
	1/28/2003	NA	NA	6.7	1141	128	69.5	NA
	4/29/2003	NA	<0.50	6.6	1020	96	68.0	NA
	8/7/2003	NA	NA	6.6	946	54	68.7	NA
	11/3/2003	NA	NA	6.3	823	387	66.8	NA
	1/27/2004	NA	NA	6.3	1140	53	69.1	NA
	5/28/2004	NA	NA	6.6	921	147	69.4	80
	5/10/2005	0.3	NA	6.6	1013	37	69.5	-72
	8/10/2005	0.3	NA	6.7	970	>1000	68.8	NA
GW-38	7/30/2002	0.19	<5	6.7	704	224	69.0	NA
	10/28/2002	NA	NA	7.1	651	59	70.5	NA
	1/28/2003	NA	NA	6.8	701	13	70.0	NA
	4/29/2003	NA	NA	6.7	727	33	68.0	NA
	8/7/2003	NA	NA	6.7	724	87	68.8	NA
	11/3/2003	NA	NA	6.2	717	55	68.8	NA
	1/27/2004	NA	NA	6.5	708	38	69.7	NA
	5/28/2004	NA	NA	6.7	692	30	69.1	115
	5/10/2005	0.5	NA	6.9	634	34	69.1	50

**Table 3. D.O., Nitrate, and Indicator Parameters**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Sample Date	DO (mg/L)	Nitrates (mg/L)	pH	Conductivity (uS/cm)	Turbidity (NTU)	Temperature (°F)	ORP (mV)
GW-39	7/30/2002	0.20	NA	NA	NA	NA	NA	NA
	10/28/2002	NA	NA	7.1	595	122	70.1	NA
	1/28/2003	NA	NA	6.3	703	90	68.5	NA
	4/29/2003	NA	NA	6.6	658	122	67.4	NA
	8/7/2003	NA	NA	6.6	634	74	68.9	NA
	11/3/03 -				Not Sampled			
	5/10/2005	0.3	NA	6.6	659	9	67.0	41
DPE-1	11/3/2003	NA	NA	6.5	1059	280	67.7	NA
	1/27/2004	NA	NA	6.4	943	514	67.7	NA
	5/28/2004	NA	NA	6.6	847	996	68.1	27
	5/10/2005	0.3	NA	6.5	920	47	67.3	-125
	8/10/2005	0.3	NA	6.6	777	37	69.4	NA
DPE-2	1/27/2004	NA	NA	6.4	890	68	71.3	NA
	5/28/2004				Not Sampled			
	5/10/2005	0.3	NA	6.6	899	27	69.3	-125
DPE-3	11/3/2003	NA	NA	6.6	1022	192	69.4	NA
	1/27/2004	NA	NA	6.4	847	38	71.4	NA
	5/28/2004				Not Sampled			
	5/10/2005	0.3	NA	6.8	878	17	70.3	-156
DPE-4	5/10/2005	0.4	NA	6.7	655	13	69.1	-130
DPE-5	1/27/2004	NA	NA	6.4	776	156	69.9	NA
	5/28/2004				Not Sampled			
	5/10/2005	0.6	NA	6.8	635	27	69.2	-99
	8/10/2005	0.1	NA	6.7	655	48	68.5	NA
DPE-6	1/27/2004	NA	NA	6.5	733	167	68.8	NA
	5/28/2004				Not Sampled			
	5/10/2005	0.7	NA	6.7	641	12	67.5	-80
DPE-7	5/10/2005	0.4	NA	6.9	659	12	67.7	-84
	8/10/2005	0.5	NA	6.8	580	72	67.8	NA
DPE-8	5/10/2005	0.4	NA	6.7	779	10	68.1	-56
DPE-9	11/3/2003	NA	NA	6.7	1010	236	67.8	NA
	1/27/2004	NA	NA	6.3	769	75	66.6	NA
	5/28/2004	NA	NA	6.6	760	71000	68.2	31
	5/10/2005	0.1	NA	6.8	729	10	66.0	-113
	8/10/2005	0.7	NA	6.4	802	34	69.0	NA

**Notes:**

DO = Dissolved Oxygen

mg/L = milligrams per liter

uS/cm = microSiemens per centimeter

NTU = nephelometric turbidity units

°F = degrees Fahrenheit

ORP = Oxidation-reduction potential

mV = millivolts

NA = Constituent not analyzed

a = The well was purged but not sampled.

b = A groundwater sample was collected to be analyzed for nitrates only. The well was not

c = Visual observation

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA
			ug/L										
GW-1 Upper-A	11/17/1986		NA	NA		NA	540	160	<2.5	820	NA	NA	***
	12/23/1986		NA	NA		NA	540	280	280	1,400	NA	NA	1.2
	5/12/1987		NA	NA		NA	8,900	2,000	1,100	3,300	NA	NA	***
	6/2/1987		NA	NA		NA	4,800	1,800	1,000	3,100	NA	NA	***
	12/16/1987		NA	NA		NA	2,900	1,500	3,100	14,000	NA	NA	NA
	3/22/1988		12,400	NA		<50	1,450	425	550	2,025	NA	NA	NA
	7/6/1988		20,800	NA		<10,000	5,400	400	2,500	560	NA	NA	NA
	10/11/1988		61,000	NA		<5,000	2,100	1,100	2,700	10,500	NA	NA	NA
	1/13/1989		82,000	NA		NA	2,000	850	3,800	13,000	NA	NA	NA
	4/13/1989		190,000	NA		NA	1,100	850	1,900	9,600	NA	NA	NA
	7/21/1989		70,000	NA		NA	650	270	1,400	3,400	NA	NA	NA
	1998	Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
	4/29/2002		13,000	10,000 <sup>1</sup>		NA	47	20	970	330	<10	<10, TBA < 250	NA
	7/30/2002	Not sampled due to free product											
	10/28/2002	8015M/8020/8260B	12,000	33,000 <sup>1,3</sup>		NA	25	13	680	270	<10	<10, TBA < 250	NA
	1/28/2003 & 4/29/03	Not sampled due to sheen											
	8/7/2003	8015M/8260	30,000	NA		NA	<100	<100	830	230	<100	<100, TBA < 2,500	NA
	11/3/2003	8015M/8260	9,300	NA		NA	<5.0	<5.0	72	15	<5.0	<5.0, TBA < 100	NA
	1/27/2004	8015M/8260B	12,000	NA		NA	<20	<20	460	91	<20	<20, TBA < 500	NA
	5/28/2004	5030/8015M/8260B	32,000	NA		NA	<20	<20	420	190	<20	<20, TBA < 500	NA
	5/10/2005	5030/8015M/8260B	4,300	14,000 <sup>1,4</sup>	<2,000	NA	1.6	1.2	93	20	<1.0	<1.0, TBA < 25	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	7,800	NA	NA	NA	<5.0	<5.0	99	<5.0	<5.0	<5.0, TBA < 120	NA
GW-2 Upper-A	11/17/1986		NA	NA		NA	460	9,800	1.9	1,500	NA	NA	***
	11/17/1986*		NA	NA		NA	330	480	NA	1,800	NA	NA	1.90
	12/23/1986		NA	NA		NA	1,200	470	1,100	4,600	NA	NA	0.80
	5/12/1987		NA	NA		NA	2,600	610	550	1,700	NA	NA	***
	12/16/1987		NA	NA		NA	2,900	480	1,400	3,100	NA	NA	NA
	3/22/1988		12,400	NA		<50	1,056	268	536	1,370	NA	NA	NA
	6/30/1988		22,000	NA		<6,250	1,700	340	780	2,200	NA	NA	NA
	10/6/1988		17,000	NA		<12,500	1,100	420	1,100	2,900	NA	NA	NA
	1/13/1989		47,000	NA		NA	1,800	420	730	3,900	NA	NA	NA
	4/13/1989		32,000	NA		NA	850	160	530	1,500	NA	NA	NA
	7/20/1989		90,000	NA		NA	1,000	250	1,200	1,900	NA	NA	NA
	1998	Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
	4/29/2002	Not sampled due to sheen											
	1/30/2002	8015M/8020/8260M	8,800	150,000 <sup>1,2</sup>		NA	130	54	290	76	<5.0	<5.0, TBA < 100	<5.0
	7/30/2002	Not sampled due to free product											
	10/28/2002 thru 4/29/03	Not sampled due to sheen											
	8/7/2003	8015M/8260	20,000	NA		NA	7.0	7.1	370	26	<5.0	<5.0, TBA < 100	<5.0
	11/3/2003	8015M/8260	4,700	NA		NA	3.3	<2.0	11	2.0	<2.0	<2.0, TBA < 50	NA
	1/27/2004	8015M/8260B	11,000	NA		NA	8.5	<5.0	130	14	<5.0	<5.0, TBA < 100	NA
	5/28/2004	5030/8015M/8260B	28,000	NA		NA	<5.0	<5.0	110	10	<5.0	<5.0, TBA < 100	NA
	5/10/2005	5030/8015M/8260B	31,000	21,000 <sup>1,4</sup>	<2,000	NA	12	<10	81	14	<10	<1.0, TBA < 25	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	18,000	NA	NA	NA	<10	<10	150	15	<10	<10, TBA < 250	NA

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company

Third and Railroad Streets, Santa Rosa, California

Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA	
			ug/L											
GW-3	11/17/1986		NA	NA		NA	420	120	<2.5	770	NA	NA	<0.1	
	12/23/1986		NA	NA		NA	530	46	38	720	NA	NA	<0.1	
	5/12/1987		NA	NA		NA	2,100	250	230	430	NA	NA	<1	
	12/16/1987		NA	NA		NA	1,900	1,200	730	3,300	NA	NA	NA	
	3/22/1988		8,200	NA		<50	300	190	140	340	NA	NA	NA	
	3/22/1988		11,000	NA		<50	620	380	310	620	NA	NA	NA	
	6/30/1988		2,900	NA		<2,500	1,100	60	80	50	NA	NA	NA	
	6/30/1988		2,600	NA		<2,500	980	42	45	60	NA	NA	NA	
Abandoned														
GW-4	11/17/1986		NA	NA		NA	500	3,500	<50	5,700	NA	NA	0.80	
	12/23/1986		NA	NA		NA	2,200	2,400	1,800	6,700	NA	NA	1.0	
	5/12/1987		NA	NA		NA	1,500	880	890	2,000	NA	NA	***	
	12/17/1987		NA	NA		NA	4,100	3,300	1,900	8,500	NA	NA	NA	
	3/22/1988		30,000	NA		<50	430	410	230	800	NA	NA	NA	
	6/28/1988		17,000	NA		<12,500	2,700	1,200	1,100	2,000	NA	NA	NA	
Abandoned														
GW-5	11/17/1986		NA	NA		NA	550	5.0	<1	1,300	NA	NA	8.30	
	12/23/1986		NA	NA		NA	910	360	380	5,500	NA	NA	7.40	
	5/12/1987		NA	NA		NA	7,100	5400	1,800	6,000	NA	NA	***	
	12/16/1987		NA	NA		NA	2,200	410	820	2,800	NA	NA	NA	
	3/22/1988		18,000	NA		<50	2,600	390	570	1,800	NA	NA	NA	
	6/30/1988		14,000	NA		<12,500	1,700	310	350	1,300	NA	NA	NA	
Abandoned														
GW-6	11/17/1986		NA	NA		NA	<0.1	<0.1	<0.1	<0.1	NA	NA	<0.1	
	5/12/1987		NA	NA		NA	150	1.0	2.2	3.3	NA	NA	<0.1	
	12/23/1986		NA	NA		NA	<0.1	<0.1	<0.1	<0.1	NA	NA	<0.1	
	12/16/1987		NA	NA		NA	390	12	8.7	27	NA	NA	<0.5	
	3/22/1988		130	NA		<50	12	1.5	0.7	3.4	NA	NA	NA	
	6/28/1988		80	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
Abandoned														
GW-7 Upper-A	11/17/1986		NA	NA		NA	330	480	<25	1,800	NA	NA	7.20	
	12/23/1986		NA	NA		NA	930	250	280	1,500	NA	NA	<0.1	
	1/19/1987		NA	NA		NA	1,900	100	850	2,200	NA	NA	NA	
	12/16/1987		NA	NA		NA	NA	NA	NA	NA	NA	NA	<25	
	4/8/1988		1,200,000	NA		<250,000	5,000	2,200	2,600	13,000	NA	NA	NA	
	7/22/1988		410,000	NA		<250	21,000	10,000	15,000	51,000	NA	NA	NA	
	10/11/1988		47,000	NA		<25,000	6,500	360	2,900	9,100	NA	NA	NA	
	1/13/1989		4,188,000	NA		NA	3,500	430	2,400	5,600	NA	NA	NA	
	4/13/1989		290,000	NA		NA	2,300	310	2,600	7,500	NA	NA	NA	
	7/21/1989		510,000	NA		NA	5,700	310	4,400	6,700	NA	NA	NA	
	1998		Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
	10/29/2001		Not sampled due to free product											
	1/30/2002 thru 4/29/03		Not sampled due to sheen											
	8/7/2003	8015M/8260	29,000	NA		NA	220	6.6	490	100	<5.0	<5.0, TBA <250	NA	
	11/3/2003	8015M/8260	37,000	NA		NA	270	10	430	82	<10	<10, TBA <250	NA	
	1/27/2004	8015M/8260B	8,800	NA		NA	51	<5.0	130	12	<5.0	<5.0, TBA <100	NA	
	5/10/2005	5030/8015M/8260B	5,300	4,900 <sup>1</sup>	<200	NA	23	2.0	80	4.5	<1.0	<1.0, TBA <25	NA	

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company

Third and Railroad Streets, Santa Rosa, California

Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA
			ug/L										
GW-8	12/18/1987		NA	NA		NA	4,600	250	210	24	NA	NA	NA
	3/22/1988		6,700	NA		<50	970	150	60	90	NA	NA	NA
GW-9	12/18/1987		NA	NA		NA	220	<0.8	<0.8	<0.8	NA	NA	NA
			Abandoned										
GW-10	12/18/1987		NA	NA		NA	<0.8	<0.8	<0.8	<0.8	NA	NA	NA
			Abandoned										
GW-11	12/18/1987		NA	NA		NA	<0.8	<0.8	<0.8	<0.8	NA	NA	NA
	3/22/1988		<50	NA		<50	0.6	0.6	<0.2	1.4	NA	NA	NA
GW-12	12/18/1987		NA	NA		NA	NA	NA	NA	NA	NA	NA	NA
	4/8/1988		6,000,000	NA		<25,000	4,000	1,000	1,000	5,000	NA	<5.0	NA
Upper-A	7/22/1988		56,000	NA		<250	8,000	1,200	1,400	9,400	NA	NA	NA
	10/11/1988		460,000	NA		<25,000	12,000	2,600	1,100	33,000	NA	NA	NA
	1/13/1989		72,000	NA		NA	8,700	970	2,900	9.1	NA	NA	NA
	1/13/1989		70,000	NA		NA	120	55	270	6,600	NA	NA	NA
	4/13/1989		25,000	NA		NA	3,200	310	1,100	3,300	NA	NA	NA
	7/21/1989		81,000	NA		NA	7,600	470	2,700	4,200	NA	NA	NA
	1998		Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.										
	10/29/2001	5030/8015M/8260	18,000	9,800		9,800	400	<30	770	<50	<50 - <1,000	***	NA
	7/25/2001		Not sampled due to free-product										
	10/29/2001	5030/8015M/8260	18,000	9,800		9,800	400	<30	770	<50	<0.50	***	<50
1/30/2002 thru 4/29/03	1/30/2002		Not sampled due to sheen										
	8/7/2003	8015M/8260	15,000	NA		NA	390	12	640	30	<10	<10, TBA <250	NA
	11/3/2003	8015M/8260	11,000	NA		NA	47	<5.0	83	5.7	17	<5.0, TBA <100	NA
	1/27/2004	8015M/8260B	9,100	NA		NA	180	<10	420	17	<10	<10, TBA <250	NA
	5/28/2004	5030/8015M/8260B	5,700	NA		NA	170	<10	280	18	<10	<10, TBA <250	NA
	5/10/2005	5030/8015M/8260B	8,000	4,700 <sup>1</sup>	<200	NA	140	6.5	240	12	<5.0	<5.0, TBA <120	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	7,100	NA	NA	NA	30	<5.0	27	6.2	<5.0	<5.0, TBA <120	NA
GW-13A	12/16/1987		NA	NA		NA	1,000	500	360	950	NA	NA	NA
	3/22/1988		3,700	NA		<50	370	22	36	100	NA	NA	NA
	6/28/1988		660	NA		<250	<2.5	1.5	<2.5	3.1	NA	NA	NA
	10/6/1988		1,300	NA		<250	19	6.4	18	21	NA	NA	NA
	1/11/1989		4,000	NA		NA	450	20	35	180	NA	NA	NA
	4/11/1989		2,700	NA		NA	200	18	130	180	NA	NA	NA
	7/20/1989		300	NA		NA	2.6	<0.5	1.2	<0.5	NA	NA	NA
	1998		Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.										
	7/25/2001	8015M/8260	<50	<50		<50	<0.30	<0.30	<0.50	<0.50	<0.50	***	NA
	10/29/2001	8015M/8260	130	<50		<50	<0.30	<0.30	<0.50	<0.50	<0.50	***	<0.50
Upper-A	1/30/2002	8015M/8020/8260M	120	50 <sup>1</sup>		NA	0.75	0.62	0.66	<1.5	<1.0	<1.0, TBA <25	<1.0
	4/29/2002	8015M/8020/8260M	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	7/30/2002	8015M/8020/8260M	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	10/28/2002	8015M/8020/8260B	100	<50		NA	0.61	<0.5	0.55	<1.5	<1.0	<1.0, TBA <25	NA
	1/28/2003	8015M/8020/8260B	97	88 <sup>1</sup>		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	4/29/2003	8015M/8020/8260B	86	73 <sup>1</sup>		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	8/7/2003	8015M/8260	<50	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	5/28/2004	5030/8015M/8260B	<50	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	5/10/2005	5030/8015M/8260B	98	<50	<200	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	<50	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company

Third and Railroad Streets, Santa Rosa, California

Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA
			ug/L										
GW-14 Upper-A	12/16/1987		<50	NA		<50	<0.8	<0.8	<0.8	NA	NA		<b>26</b>
	3/22/1988		<b>400</b>	NA		<50	<b>40</b>	<b>1.9</b>	<b>0.7</b>	NA	NA		<0.5
	6/25/1988		<b>410</b>	NA		<50	<b>24</b>	<b>2.7</b>	<b>0.9</b>	NA	NA		NA
	10/6/1988		<b>270</b>	NA		<100	<b>6.8</b>	<b>6.0</b>	<1.0	NA	NA		NA
	1/11/1989		<50	NA		NA	<b>2.2</b>	<b>1.3</b>	<b>0.75</b>	NA	NA		NA
	4/12/1989		<50	NA		NA	<1.0	<1.0	<1.0	NA	NA		NA
	7/20/1989		<100	NA		NA	<b>0.6</b>	<0.5	<0.5	NA	NA		NA
	1998	Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
	2/19/1990		ND	NA		NA	ND	ND	NA	NA	NA		NA
	6/22/1990		ND	NA		NA	ND	ND	NA	NA	NA		NA
	10/24/1990		ND	NA		NA	ND	ND	NA	NA	NA		NA
	7/25/2001	8015M/8260	<50	<50		<50	<0.30	<0.30	<0.50	ND	<0.50, TBA <10		NA
	10/29/2001	8015M/8260	<4.0	<50		<50	<0.30	<0.30	<0.50	ND	<0.50, TBA <10		<0.50
	1/30/2002	8015M/820/8260M	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0, TBA <25		<1.0
	4/29/2002	8015M/820/8260M	<50	<50		NA	<1.0	<1.0	<1.0	NA	<1.0, TBA <25		NA
	7/30/2002	8015M/820/8260M	<50	<50		NA	<1.0	<1.0	<1.0	NA	<1.0, TBA <25		NA
	10/28/2002	8015M/820/8260B	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0, TBA <25		NA
	1/28/2003	8015M/820/8260B	<50	<50		NA	<1.0	<1.0	<1.0	NA	<1.0, TBA <25		NA
	4/29/2003	8015M/820/8260B	<50	<50		NA	<1.0	<1.0	<1.0	NA	<1.0, TBA <25		NA
	8/7/2003	8015M/8260	<50	NA		NA	<1.0	<1.0	<1.0	NA	<1.0, TBA <25		NA
	1/27/2004	8015M/8260B	<50	NA		NA	<1.0	<1.0	<1.0	NA	<1.0, TBA <25		NA
	5/10/2005	5030/8015M/8260B	<50	<50	<200	NA	<1.0	<1.0	<1.0	NA	<1.0, TBA <25		NA
GW-15 Upper-A	12/18/1987		<b>110</b>	NA		<50	<b>2.4</b>	<0.8	<0.8	NA	NA		<b>1.50</b>
	3/24/1988		<50	NA		NA	<0.2	<0.2	<0.2	NA	NA		<0.5
	7/1/1988		<50	NA		<50	<0.5	<0.5	<0.5	NA	NA		NA
	10/7/1988		<50	NA		<50	<0.5	<0.5	<0.5	NA	NA		NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	NA	NA		NA
	4/12/1989		<50	NA		NA	<1.0	<1.0	<1.0	NA	NA		NA
	7/20/1989		<100	NA		NA	<0.5	<0.5	<0.5	NA	NA		NA
	2/19/1990		ND	NA		NA	ND	ND	NA	NA	NA		NA
	6/25/1990		ND	NA		NA	ND	ND	NA	NA	NA		NA
	10/24/1990		ND	NA		NA	ND	ND	NA	NA	NA		NA
	7/25/2001	8015M/8260	<50	<50		<50	<0.30	<b>0.90</b>	<0.50	<0.50	<0.50	***	NA
	10/29/2001	8015M/8260	<4.0	<50		<50	<0.30	<0.30	<0.50	<0.50	<0.50	***	<0.50
	1/30/2002	8015M/820/8260M	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0	<1.0, TBA <25	<1.0
	4/29/2002	8015M/820/8260M	<50	<50		NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0, TBA <25	NA
	7/30/2002	8015M/820/8260M	<50	<50		NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0, TBA <25	NA
	10/28/2002	8015M/820/8260B	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0	<1.0, TBA <25	NA
	1/28/2003	8015M/820/8260B	<50	<50		NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0, TBA <25	NA
	4/29/2003	8015M/820/8260B	<50	<50		NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0, TBA <25	NA
	8/7/2003	8015M/8260	<50	NA		NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0, TBA <25	NA
	1/27/2004	8015M/8260B	<50	NA		NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0, TBA <25	NA
	5/10/2005	5030/8015M/8260B	<50	<50	<200	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0, TBA <25	NA

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA
			ug/L										
GW-16 Upper-A	12/29/1987		51	NA		50	22	<0.5	<0.5	0.5	NA	NA	NA
	3/24/1988		460	NA		<50	240	2.5	0.9	3.9	NA	NA	2.7
	7/1/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	10/7/1988		150	NA		<50	4.4	1.5	0.9	3.6	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	2/19/1990		180	8.5		NA	8.5	ND	5.3	0.98	NA	NA	NA
	6/21/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
	10/24/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
	7/25/2001	8015M/8260	<50	<50		<50	<0.30	<0.30	<0.50	<0.50	***	NA	NA
	10/29/2001	8015M/8260	<4.0	<50		<50	<0.30	<0.30	<0.50	<0.50	2.5	***	<0.50
	1/30/2002	8015M/820/8260M	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0	<1.0, TBA <25	<1.0
	4/29/2002	8015M/820/8260M	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	7/30/2002	8015M/820/8260M	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	10/28/2002	8015M/820/8260B	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0	<1.0, TBA <25	NA
	1/28/2003	8015M/820/8260B	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	4/29/2003	8015M/820/8260B	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	8/7/2003	8015M/8260	<50	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	5/28/2004	5030/8015M/8260B	<50	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	5/10/2005	5030/8015M/8260B	<50	<50	<200	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	<50	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
GW-18 B-Aquifer	1/12/1988		<50	NA		<50	NA	NA	NA	NA	NA	NA	NA
	4/21/1988		NA	NA		NA	<0.2	<0.2	<0.2	<0.2	NA	NA	<0.5
	6/28/1988		<50	NA		<50	<0.2	1.3	<0.5	2.0	NA	NA	NA
	10/7/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/13/1989		<50	NA		NA	3.9	<0.5	<1.5	<1.5	NA	NA	NA
	7/20/1989		<100	NA		NA	1.1	<0.5	<0.5	<0.5	NA	NA	NA
	1998	Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
	2/19/1990		ND	NA		NA	ND	0.63	ND	0.42	NA	NA	NA
	7/25/2001	8015M/8260	<50	<50		<50	<0.30	1.2	<0.50	<0.50	<0.50	***	NA
GW-19 Upper-A	10/29/2001	8015M/8260	<50	<50		<50	<0.30	<0.30	<0.50	<0.50	<0.50	***	<0.50
	1/30/2002	8015M/820/8260M	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0	<1.0, TBA <25	<1.0
	4/29/2002	8015M/820/8260M	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	7/30/2002	8015M/820/8260M	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	10/28/2002	8015M/820/8260B	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0	<1.0, TBA <25	NA
	1/28/2003	8015M/820/8260B	<50	<50		NA	<1.0	<1.0	<1.0	1.3	<1.0	<1.0, TBA <25	NA
	4/29/2003	8015M/820/8260B	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	8/7/2003	8015M/8260	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	5/10/2005	5030/8015M/8260B	<50	<50	<200	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	<50	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA	
			ug/L											
GW-20	3/24/1988		<50	NA		NA	<0.2	<0.2	<0.2	<0.2	NA	NA	<0.5	
	7/1/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
	10/11/1988		<50	NA		<50	<0.5	<0.5	<0.5	<b>1.0</b>	NA	NA	NA	
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
	4/11/1989		<50	NA		NA	<b>2.8</b>	<0.5	<1.5	<1.5	NA	NA	NA	
	7/19/1989		<100	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
GW-21	4/4/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5	
	6/21/1988		<b>60</b>	NA		<50	<b>1.0</b>	<b>2.0</b>	<0.5	<b>19</b>	NA	NA	NA	
	10/11/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
	4/11/1989		<50	NA		NA	<0.5	<0.5	<1.5	<1.5	NA	NA	NA	
	7/19/1989		<100	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
GW-22	4/5/1988		<b>3,400</b>	NA		<250	<b>315</b>	<b>27</b>	<b>90</b>	<b>230</b>	NA	NA	<0.5	
	7/1/1988		<b>310</b>	NA		<50	<0.5	<b>1.7</b>	<0.5	<b>1.0</b>	NA	NA	NA	
	10/12/1988		<50	NA		<50	<0.5	<0.5	<0.5	<b>1.3</b>	NA	NA	NA	
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
	4/11/1989		<b>420</b>	NA		NA	<b>45</b>	<b>2.1</b>	<1.5	<b>3.8</b>	NA	NA	NA	
	7/19/1989		<b>360</b>	NA		NA	<b>6.0</b>	<0.5	<0.5	<0.5	NA	NA	NA	
GW-23	4/5/1988		<b>30,000</b>	NA		<250	<b>780</b>	<b>710</b>	<b>285</b>	<b>735</b>	NA	NA	<0.5	
	6/28/1988		<b>31,000</b>	NA		<5000	<b>10,000</b>	<b>1,900</b>	<b>1,600</b>	<b>4,500</b>	NA	NA	NA	
	10/12/1988		<b>29,000</b>	NA		<6250	<b>16,000</b>	<b>750</b>	<b>3,000</b>	<b>5,800</b>	NA	NA	NA	
	1/13/1989		<b>71,000</b>	NA		NA	<b>9,600</b>	<b>1,300</b>	<b>5,700</b>	<b>6,900</b>	NA	NA	NA	
	4/13/1989		<b>21,000</b>	NA		NA	<b>4,200</b>	<b>340</b>	<b>1,400</b>	<b>2,300</b>	NA	NA	NA	
	7/21/1989		<b>54,000</b>	NA		NA	<b>6,600</b>	<b>220</b>	<b>2,000</b>	<b>1,800</b>	NA	NA	NA	
GW-24	4/6/1988		<50	NA		NA	<0.2	<0.2	<0.2	<0.5	NA	NA	***	
	6/29/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
	10/11/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
	4/12/1989		<50	NA		NA	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	
	7/19/1989		<100	NA		NA	<b>0.7</b>	<0.5	<0.5	<0.5	NA	NA	NA	
	2/19/1990		ND	NA		NA	ND	ND	<b>0.3</b>	ND	NA	NA	NA	
	6/22/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA	
	10/27/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA	
GW-25	4/11/1988		<b>14,700</b>	NA		<1,000	<b>2,960</b>	<b>440</b>	<b>184</b>	<b>1,290</b>	NA	NA	<b>8.0</b>	
	6/28/1988		<b>11,000</b>	NA		<25000	<b>3,400</b>	<b>100</b>	<25	<b>1,900</b>	NA	NA	NA	
	10/12/1988		<b>6,600</b>	NA		<1250	<b>2,200</b>	<b>44</b>	<b>160</b>	<b>340</b>	NA	NA	NA	
	1/13/1989		<b>16,000</b>	NA		NA	<b>1,500</b>	<b>9.1</b>	<b>26</b>	<b>1,600</b>	NA	NA	NA	
	4/11/1989		<50	NA		NA	<b>120</b>	<b>170</b>	<b>360</b>	<b>720</b>	NA	NA	NA	
	7/19/1989		<b>21,000</b>	NA		NA	<b>2,300</b>	<b>73</b>	<b>590</b>	<b>440</b>	NA	NA	NA	
	2/19/1990		<b>12,000</b>	NA		NA	<b>1,200</b>	<b>92</b>	<b>850</b>	<b>860</b>	NA	NA	NA	
	6/25/1990		<b>10,000</b>	NA		NA	<b>780</b>	<b>44</b>	<b>5.9</b>	<b>410</b>	NA	NA	NA	
	10/27/1990		<b>16,000</b>	NA		NA	<b>1,000</b>	<b>100</b>	<b>970</b>	<b>1,200</b>	NA	NA	NA	
GW-26	4/14/1988		<b>20,000</b>	NA		<250	<b>8,410</b>	<b>488</b>	<b>492</b>	<b>1,250</b>	NA	NA	<b>3.0</b>	
GW-26A			Abandoned											
	5/5/1988		<b>6,600</b>	NA		<500	<b>1,800</b>	<b>50</b>	<b>6.0</b>	<b>510</b>	NA	NA	<b>1.3</b>	
	7/1/1988		<b>3,000</b>	NA		<2,000	<b>1,000</b>	<b>21</b>	<20	<b>90</b>	NA	NA	NA	
	10/11/1988		<b>4,900</b>	NA		<1,250	<b>2,200</b>	<0.5	<b>320</b>	<b>260</b>	NA	NA	NA	
	1/11/1989		<b>2,100</b>	NA		NA	<b>250</b>	<b>2.6</b>	<b>6.7</b>	<b>19</b>	NA	NA	NA	
	4/12/1989		<b>700</b>	NA		NA	<b>8.3</b>	<1.0	<1.0	<b>22</b>	NA	NA	NA	
	7/19/1989		<b>4,900</b>	NA		NA	<b>140</b>	<b>4.0</b>	<b>190</b>	<b>79</b>	NA	NA	NA	

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company  
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Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA
			ug/L										
GW-27	4/14/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5
	6/29/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	10/11/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/12/1989		<50	NA		NA	<1.0	<1.0	<1.0	<1.0	NA	NA	NA
	7/19/1989		<100	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
GW-28	4/14/1988		1,504	NA		<250	538	17	47	62	NA	NA	<0.5
	6/28/1988		870	NA		<250	65	7	<2.5	13	NA	NA	NA
	10/12/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	1/11/1989		1,500	NA		NA	<0.5	<0.5	<0.5	0.89	NA	NA	NA
	4/11/1989		270	NA		NA	22	3.3	<1.5	6.9	NA	NA	NA
	7/19/1989		570	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
GW-29	4/25/1988		4,840	NA		<250	120	12.5	39.5	67	NA	NA	***
	6/30/1988		NA	NA		NA	2.0	<0.5	<0.5	4.7	NA	NA	0.9
	7/3/1988		770	NA		<50	NA	NA	NA	NA	NA	NA	NA
	10/12/1988		1,400	NA		<500	75	4.0	5.6	14	NA	NA	NA
	1/11/1989		2,400	NA		NA	7.5	72	<0.5	12	NA	NA	NA
	4/11/1989		<50	NA		NA	<0.5	<0.5	<1.5	<1.5	NA	NA	NA
	7/19/1989		1,700	NA		NA	33	<0.5	3.4	2.2	NA	NA	NA
GW-30	4/25/1988		51,210	NA		<2,500	13,150	7,500	1,085	5,300	NA	NA	26
	6/28/1988		19,000	NA		<5,000	NA	NA	NA	NA	NA	NA	NA
	7/6/1988		NA	NA		<1,000	1,650	1,300	122	2,000	NA	NA	35
	10/11/1988		11,000	NA		<2,500	6,300	540	190	870	NA	NA	NA
	1/13/1989		12,000	NA		NA	2,400	900	39	580	NA	NA	NA
	4/13/1989		3,600	NA		NA	530	170	78	300	NA	NA	NA
	7/20/1989		14,000	NA		NA	1,000	210	180	290	NA	NA	NA
	1998	Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
GW-31 Lower-A	5/4/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5
	7/6/1988		<50	NA		<50	<0.5	<0.5	<0.5	0.6	NA	NA	<0.5
	10/11/1988		<50	NA		<50	5.9	3.7	<0.5	4.6	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/12/1989		<50	NA		NA	<1.0	<1.0	<1.0	<1.0	NA	NA	NA
	7/21/1989		<100	NA		NA	0.5	<0.5	0.6	<0.5	NA	NA	NA
	1998	Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
	7/25/2001	8015M/8260	<50	<50		<50	<0.30	<0.30	<0.50	<0.50	3.4	NA	NA
	10/29/2001	8015M/8260	<50	<50		<50	<0.30	<0.30	<0.50	<0.50	3.2	NA	4.4
	1/30/2002	8015M/8020/8260M	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	4.0	<1.0, TBA < 25	2.4
	4/29/2002	8015M/8020/8260M	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	2.5	<1.0, TBA < 25	4.0
	7/30/2002	8015M/8020/8260M	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	2.3	<1.0, TBA < 25	4.8
	10/28/2002	8015M/8020/8260B	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	3.1	<1.0, TBA < 25	NA
	1/28/2003	8015M/8020/8260B	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	3.3	<1.0, TBA < 25	4.0
	4/29/2003	8015M/8020/8260B	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	3.3	<1.0, TBA < 25	5.7
	8/7/2003	8015M/8260	<50	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	6.8
	5/10/2005	5030/8015M/8260B	<50	<50	<200	NA	<1.0	<1.0	<1.0	<1.0	2.6	<1.0, TBA < 25	7.0
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	<50	NA	NA	NA	<1.0 <sup>s</sup>	<1.0	<1.0	<1.0	2.0	<1.0, TBA < 25	6.4

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company  
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Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA
			ug/L										
GW-32	6/30/1988		NA	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	0.5
	7/3/1988		<50	NA		<50	NA	NA	NA	NA	NA	NA	NA
	10/11/1988		<b>83</b>	NA		<50	<b>34</b>	<b>1.8</b>	<b>1.0</b>	<b>3.2</b>	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/12/1989		<50	NA		NA	<1.0	<1.0	<1.0	<1.0	NA	NA	NA
	7/20/1989		<100	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	1998	Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
	2/19/1990		<b>1,300</b>	NA		NA	<b>140</b>	<b>16</b>	<b>47</b>	<b>99</b>	NA	NA	NA
	6/23/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
	10/26/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
	6/30/1988		NA	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5
	7/3/1988		<50	NA		<50	NA	NA	NA	NA	NA	NA	NA
	10/11/1988		<b>76</b>	NA		<50	<b>3.5</b>	<0.5	<b>0.9</b>	<b>6.8</b>	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/13/1989		<50	NA		NA	<0.5	<0.5	<1.5	<1.5	NA	NA	NA
	7/20/1989		<100	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	1998	Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.											
GW-33A	2/19/1990		ND	NA		NA	ND	<b>0.03</b>	ND	ND	NA	NA	NA
	6/22/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
	10/25/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
GW-34	7/25/1988		<50	NA		<50	<0.5	<0.5	<0.5	<b>2.0</b>	NA	NA	<b>6.6</b>
	10/12/1988		<50	NA		<50	<b>0.6</b>	<0.5	<0.5	<b>1.1</b>	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/12/1989		<50	NA		NA	<0.5	<0.5	<1.5	<1.5	NA	NA	NA
	7/19/1989		<100	NA		NA	<0.5	<b>0.5</b>	<0.5	<0.5	NA	NA	NA
	2/19/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
	6/23/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
GW-35	10/25/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
	7/22/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5
	10/11/1988		<b>54</b>	NA		<50	<b>3.0</b>	<b>1.0</b>	<b>1.5</b>	<b>5.8</b>	NA	NA	<0.5
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/11/1989		<50	NA		NA	<0.5	<0.5	<1.5	<1.5	NA	NA	NA
	7/19/1989		<100	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
GW-36	7/27/1988		NA	NA		NA	NA	NA	NA	NA	NA	NA	<b>1.5</b>
	8/7/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	10/12/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/12/1989		<50	NA		NA	<0.5	<0.5	<1.5	<1.5	NA	NA	NA
	7/19/1989		<100	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	2/19/1990		<b>160</b>	NA		NA	<b>12</b>	<b>0.6</b>	<b>2.7</b>	<b>1.4</b>	NA	NA	NA
	6/23/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA
	10/27/1990		ND	NA		NA	ND	ND	ND	ND	NA	NA	NA

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Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA
GW-37	7/22/1988		9,800	NA		<2,500	6,000	340	<25	625	NA	NA	<0.5
Upper-A	10/11/1988		15,000	NA		<2,500	5,000	300	570	900	NA	NA	NA
	1/13/1989		48,000	NA		NA	3,700	2,100	240	5,500	NA	NA	NA
	4/12/1989		13,000	NA		NA	2,200	703	319	588	NA	NA	NA
	7/20/1989		21,000	NA		NA	3,100	280	660	890	NA	NA	NA
	1998		Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.										
GW-38	7/25/2001	8015M/8260	8,400	860		860	600	<30	71	<50	<50	***	NA
	10/29/2001	8015M/8260	9,400	1,400		1,400	340	19	20	18	<5.0	***	<5.0
	1/30/2002	8015M/8020/8260M	4,200	1,700 <sup>1</sup>		NA	350	27	99	32	<5.0	<5.0, TBA < 100	<5.0
	4/29/2002	8015M/8020/8260M	5,500	2,000 <sup>1</sup>		NA	210	12	190	29	<2.0	<2.0, TBA < 50	NA
	7/30/2002	8015M/8020/8260M	8,600	3,100 <sup>1</sup>		NA	150	10	52	16	<5.0	<5.0, TBA < 100	NA
	10/28/2002	8015M/8020/8260B	5,800	2,400 <sup>1</sup>		NA	170	40	97	48	<2.0	<2.0, TBA < 50	NA
	1/28/2003	8015M/8020/8260B	8,900	3,400 <sup>1</sup>		NA	280	9.7	170	20	<2.0	<2.0, TBA < 50	NA
	4/29/2003	8015M/8020/8260B	6,000	3,900 <sup>1</sup>		NA	180	11	97	19	<5.0	<5.0, TBA < 25	NA
	8/7/2003	8015M/8260	8,700	NA		NA	110	7.8	89	26	<5.0	<5.0, TBA < 100	NA
	11/3/2003	8015M/8260	5,500	NA		NA	100	6.5	16	7.4	<2.0	<2.0, TBA < 50	NA
	1/27/2004	8015M/8260B	5,900	NA		NA	290	8.5	100	15	<5.0	<5.0, TBA < 100	NA
	5/28/2004	5030/8015M/8260B	4,200	NA		NA	100	6.7	82	10	<5.0	<5.0, TBA < 100	NA
	5/10/2005	5030/8015M/8260B	6,100	2,500 <sup>1</sup>	<200	NA	180	9.8	85	14	<5.0	<5.0, TBA < 120	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	4,600	NA	NA	NA	55	<5.0	54	27	<5.0	<5.0, TBA < 120	NA
GW-39	7/22/1988		1,900	NA		<50	340	19	39	59	NA	NA	<0.5
	10/11/1988		3,900	NA		<500	800	42	330	150	NA	NA	NA
	1/13/1989		1,700	NA		NA	23	6.40	6.3	23	NA	NA	NA
	4/13/1989		780	NA		NA	27	4.1	2.0	16	NA	NA	NA
	7/20/1989		3,000	NA		NA	15	<0.5	23	<0.5	NA	NA	NA
	1998		Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.										
	7/25/2001	8015M/8260	310	<50		<50	<0.30	0.87	7.7	0.6	<0.50	***	NA
	10/29/2001	8015M/8260	<50	<50		<50	<0.30	<0.30	<0.50	<0.50	<0.50	***	<0.50
	1/30/2002	8015M/8020/8260M	340	130 <sup>1</sup>		NA	2.4	1.2	9.6	2.0	<1.0	<1.0, TBA < 25	<1.0
	4/29/2002	8015M/8020/8260M	1,100	400 <sup>1</sup>		NA	<1.0	<1.0	5.2	<1.0	<1.0	<1.0, TBA < 25	NA
	7/30/2002	8015M/8020/8260M	500	230 <sup>1</sup>		NA	<1.0	<1.0	2.7	<1.0	<1.0	<1.0, TBA < 25	NA
	10/28/2002	8015M/8020/8260B	500	130 <sup>1</sup>		NA	4.9	3.2	6.1	2.4	<1.0	<1.0, TBA < 25	NA
	1/28/2003	8015M/8020/8260B	400	180 <sup>1</sup>		NA	<1.0	<1.0	3.9	<1.0	<1.0	<1.0, TBA < 25	NA
	4/29/2003	8015M/8020/8260B	180	130 <sup>1</sup>		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
	8/7/2003	8015M/8260	450	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
	11/3/2003	8015M/8260	<50	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
	1/27/2004	8015M/8260B	61	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
	5/28/2004	5030/8015M/8260B	<50	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
	5/10/2005	5030/8015M/8260B	<50	.50	<200	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
MW-1	7/25/1988		<50	NA		<50	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5
	10/11/1988		60	NA		<50	3.2	0.7	<0.5	0.7	NA	NA	NA
	1/11/1989		<50	NA		NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	4/11/1989		<50	NA		NA	<0.5	<0.5	<1.5	<1.5	NA	NA	NA
	7/20/1989		<100	NA		NA	0.8	<0.5	<0.5	<0.5	NA	NA	NA
	1998		Monitoring wells were sampled for four quarters in 1998 by EnviroNet Consultants. Due to questions by the NCRWQCB about the quality of the data, EnviroNet's data is not presented herein.										
	10/28/2002	8015M/8020/8260B	<50	<50		NA	<0.5	<0.5	<0.5	<1.5	<1.0	<1.0, TBA < 25	NA
	1/28/2003	8015M/8020/8260B	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
	4/29/2003	8015M/8020/8260B	<50	<50		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
	8/7/2003	8015M/8260	<50	NA		NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA < 25	NA
	11/3/2003		Not sampled										
	5/10/2005	5030/8015/8260B	<50	<50	<200	NA	<1.0	3.5	<1.0	3.0	<1.0	<1.0, TBA < 25	NA
	7/25/01 thru 11/3/03		Not Sampled Due to Access Restrictions										

**Table 4. Groundwater Sample Analyses Results**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Well ID	Date Sampled	Analytic Methods	TPH-G	TPH-D	TPH-MO	TPH-K	B	T	E	X	MTBE	Oxygenated Fuel Additives	1,2-DCA
			ug/L										
DPE-1	11/3/2003	8015M/8260	13,000	NA		NA	400	16	310	72	<10	<10, TBA <250	NA
	1/27/2004	8015M/8260B	8,400	NA		NA	100	<10	290	30	<10	<10, TBA <250	NA
	5/28/2004	5030/8015M/8260B	16,000	NA		NA	120	<10	160	15	<10	<10, TBA <250	NA
	5/10/2005	5030/8015M/8260B	8,700	5,200 <sup>1</sup>	<200	NA	37	<5.0	150	9.0	<5.0	<5.0, TBA <120	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	8,300	NA	NA	NA	31	<5.0	47	<5.0	<5.0	<5.0, TBA <120	NA
DPE-2	1/27/2004	8015M/8260B	9,000	NA		NA	210	6.2	590	42	<5.0	<5.0, TBA <100	NA
	5/10/2005	5030/8015M/8260B	8,600	6,200 <sup>1</sup>	<200	NA	130	5.6	310	33	<5.0	<5.0, TBA <120	NA
DPE-3	11/3/2003	8015M/8260	29,000	NA		NA	220	7.7	20	7.2	<5.0	<5.0, TBA <100	NA
	1/27/2004	8015M/8260B	14,000	NA		NA	310	8.5	77	16	<5.0	<5.0, TBA <100	NA
	5/10/2005	5030/8015M/8260B	7,300	3,200 <sup>1</sup>	<200	NA	240	9.9	81	15	<5.0	<5.0, TBA <120	NA
DPE-4	5/10/2005	5030/8015M/8260B	3,400	1,400 <sup>1</sup>	<200	NA	1.5	1.1	49	8.9	<1.0	<1.0, TBA <25	NA
DPE-5	1/27/2004	8015M/8260B	6,000	NA		NA	13	4.3	310	110	<2.0	<2.0, TBA <50	NA
	5/10/2005	5030/8015M/8260B	4,300	1,700 <sup>1</sup>	<200	NA	4.4	1.4	47	17	<1.0	<1.0, TBA <25	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	2,000	NA	NA	NA	1.6	<1.0	8.7	6.8	<1.0	<1.0, TBA < 25	NA
DPE-6	1/27/2004	8015M/8260B	11,000	NA		NA	46	<20	210	100	<20	<20, TBA <500	NA
	5/10/2005	5030/8015M/8260B	1,900	1,100 <sup>1</sup>	<200	NA	11	1.4	27	12	<1.0	<1.0, TBA <25	NA
DPE-7	5/10/2005	5030/8015M/8260B	650	350 <sup>1</sup>	<200	NA	1.0	<1.0	<1.0	<1.0	<1.0	<1.0, TBA <25	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8260B	1,200	NA	NA	NA	2.0	<1.0	3.7	5.4	<1.0	<1.0, TBA < 25	NA
DPE-8	5/10/2005	5030/8015M/8260B	2,200	1,900 <sup>1</sup>	<200	NA	37	<1.0	39	1.9	<1.0	<1.0, TBA <25	
DPE-9	11/3/2003	8015M/8260	18,000	NA		NA	220	11	600	231	<10	<10, TBA <250	NA
	1/27/2004	8015M/8260B	9,800	NA		NA	100	<10	360	90	<10	<10, TBA <250	NA
	5/28/2004	8015M/8020	78,000	NA		NA	870	410	2,400	1,700	NA	NA	NA
	5/10/2005	5030/8015M/8020B	35,000	27,000 <sup>1</sup>	<2,000	NA	19	<10	220	28	<10	<10, TBA <250	NA
	8/10/2005 <sup>a</sup>	5030/8015M/8020B	16,000	NA	NA	NA	24	<10	160	150	<10	<10, TBA <250	NA
Trip Blank	7/25/2001	8260/8020	<50	NA		NA	<0.30	<0.30	<0.50	<0.50	NA	NA	NA
	10/29/2001	8015/8020	58	NA		NA	<0.30	1.2	0.95	6.3	NA	NA	NA
	1/30/2002	NA	---	---		---	---	---	---	---	---	---	---
	4/29/2002	8015M/8020/8260M	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
	7/30/2002	8015M/8020/8260M	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
	10/28/2002	8015M/8020	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
	1/28/2003	8015M/8020	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
	4/29/2003	8015M/8020	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
	8/7/2003	8015M/8020	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
	11/3/2003	8015M/8020	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
DPE-1	1/27/2004	8015M/8260B	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA
	5/28/2004	8015M/8020	<50	NA		NA	<0.5	<0.5	<0.5	<1.5	NA	NA	NA

**NOTES:**

Groundwater samples collected on 5/10/05 were analyzed for volatile hydrocarbons by EPA Method 8260B (full list). Other volatile hydrocarbons other than oxygenated fuel additives were detected, but were not listed above. A complete list and analytical report can be found in the 2nd Quarter 2005 Groundwater Monitoring Report (Dated 8/12/05).

\* = Duplicate Sample

\*\* = MTBE analyzed by EPA Method 8260

\*\*\* = Please reference groundwater monitoring reports for detection limits.

<sup>1</sup> = The sample does not exhibit a chromatographic pattern characteristic of diesel. Higher boiling point constituents of weathered gasoline are present.

<sup>2</sup> = The sample exhibits a pattern most similar to weathered gasoline. The result is elevated for this sample due to a floating sheen analyzed in the extraction of the 1 liter container compared to analyzing only the subsurface dissolved-phase in the TPH-G analysis.

<sup>3</sup> = The laboratory report notes that a floating product sheen may have positively impacted the result.

<sup>4</sup> = Silica gel cleanup was utilized for this sample prior to analysis.

<sup>a</sup> = The ozone/hydrogen peroxide system was installed and started-up on June 2 and 3, 2005.

**ABBREVIATIONS:**

NA = Not analyzed

ND = Not detected above laboratory detection limits

TPH-G = Total petroleum hydrocarbons as gasoline

TPH-D = Total petroleum hydrocarbons as diesel

TPH-MO = Total petroleum hydrocarbons as diesel

TPH-K = Total petroleum hydrocarbons as motor oil

B = Benzene

T = Toluene

E = Ethyl benzene

X = Total xylenes

MTBE = Methyl tert-butyl ether

1,2-DCA = 1,2-Dichloroethane

**Table 5. Additional Groundwater Analytical Results**

Former Mead Clark Lumber Company  
Third and Railroad Streets, Santa Rosa, California

Sample ID	Sample Date	Hexavalent Chromium	Bromate	Bromide	Molybdenum	Selenium	Vanadium
		EPA 7196A	EPA 300 (IC)		EPA 6010/200.9		
		<b>mg/L</b>					
GW-1	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.14</b>	<0.05	<0.005	<0.05
GW-2	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.11</b>	<0.05	<0.005	<0.05
	8/10/05 *	<0.005 <sup>c</sup>	<0.015 <sup>b</sup>	<b>0.086</b>	<0.05	<0.005	<0.05
DPE-1	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.21</b>	<0.05	<0.005	<0.05
	8/10/05 *	<0.005 <sup>c</sup>	<0.015 <sup>b</sup>	<b>0.26</b>	<0.05	<0.005	<0.05
DPE-2	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.43</b>	<0.05	<0.005	<0.05
DPE-3	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.46</b>	<0.05	<0.005	<0.05
DPE-5	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.18</b>	<0.05	<0.005	<0.05
	8/10/05 *	<0.005 <sup>c</sup>	<0.010	<b>0.23</b>	<0.05	<0.005	<0.05
DPE-7	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.14</b>	<0.05	<0.005	<0.05
	8/10/05 *	<0.005 <sup>c</sup>	<0.015 <sup>b</sup>	<b>0.17</b>	<0.05	<0.005	<0.05
DPE-8	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.45</b>	<0.05	<0.005	<0.05
DPE-9	5/10/05	<0.005 <sup>a</sup>	<0.015 <sup>b</sup>	<b>0.13</b>	<0.05	<0.005	<0.05
	8/10/05 *	<0.005 <sup>c</sup>	<0.015 <sup>b</sup>	<b>0.34</b>	<0.05	<0.005	<0.05

**Abbreviations:**

mg/L = milligrams per liter (ppm)

**Notes:**

\* = The ozone/hydrogen peroxide system was installed and started-up on June 2 and 3, 2005.

a = The specific analysis for hexavalent chromium performed within 24 hours yielded a detection limit of 0.010 mg/L. Subsequent and separate analysis for total chromium using Zeeman graphite furnace (EPA 200.9) resulted in no detection of chromium at a detection limit below 0.005 mg/L. Hexavalent chromium is not present at a level above 0.005 mg/L.

b = The sample required a dilution due to a sample matrix interference. The dilution resulted in a slight increase in the reported detection limit.

c = The result reported is for total chromium. The hexavalent chromium analysis was not performed within the recommended holding time of 24 hours. A total chromium analysis at a detection limit of 0.005 mg/L would indicate no hexavalent chromium was present above 0.005 mg/L.

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**Appendix A**  
**Site-Specific Sampling Procedures**

# **WINZLER & KELLY CONSULTING ENGINEERS**

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## **Site-Specific Groundwater Sampling Procedures Former Mead Clark Lumber Site Third and Railroad Streets, Santa Rosa, California August 10, 2005**

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### **1. Objective**

Collect representative water level data and groundwater samples.

### **2. Background**

Based on analytical results of the previous quarterly sampling event, field work proceeded from the monitoring wells with the lowest concentrations of constituents to the wells that had the highest concentrations of constituents.

Water levels were measured to determine the groundwater flow gradient and flow direction. Representative groundwater samples from the water-bearing zone were obtained using disposable polyethylene bailers after purging.

### **3. Personnel Required and Responsibilities**

Blaine Tech Services Field Technician: The technician performed water level measurements and purging activities in accordance with the procedures outlined below.

Winzler & Kelly Technician: The technician collected groundwater samples in accordance with the procedures outlined below.

### **4. Procedures**

#### **4a. Decontamination Procedures**

- The water level meter and pumps were decontaminated using a steam cleaner upon arriving at the site.
- The meters and pumps were decontaminated following use in each well.
- Nitrile gloves were worn by the technicians when handling equipment and instruments and changed after each use.

#### **4b. Groundwater Elevations**

- Each monitoring well was opened and the expandable caps were removed.
- Each well was allowed to equilibrate to atmospheric pressure for a minimum of 20 minutes.
- A water level meter was used to measure the depth-to-groundwater in each monitoring well.

- The depth, time, and visual observations regarding well access, condition, security, etc., were recorded on the water level data sheet.

#### **4c. DO Concentrations**

- The membrane on the YSI Model 55 DO meter was checked for the presence of bubbles and wrinkles, neither of which was observed.
- The meter was calibrated in the field prior to collecting measurements.
- Using the calibrated YSI Model 55 DO Meter, DO concentrations were measured in each monitoring well.

#### **4d. Purging**

- The meters used to measure indicator parameters were calibrated prior to sampling.
- The volume of standing water in each monitoring well was calculated using the measured depth-to-water and historic depth-to-bottom. The volume was recorded on the Well Sampling Data Sheet for each well.
- Each well sampled was purged of three well volumes using a down-hole 3-inch electric submersible pump attached to plastic tubing, unless the well dewatered before such a volume was purged.
- Conductivity, pH, turbidity, and temperature were monitored at each well casing interval throughout the purging process.
- The time, readings, and visual comments were recorded on the Well Sampling Data Sheet.
- Purge water was transferred to a 2,000-gallon tank stored and secured on site.

#### **4e. Groundwater Sample Collection**

- Groundwater samples were collected by lowering previously unused, disposable, polyethylene, bottom-filling bailers into the well after the water level had recharged to at least 80 percent.
- When completely full, the bailer was carefully retracted from the well casing.
- The groundwater from each well sampled was transferred from the bailer into the appropriate sampling containers.
- Upon filling, each vial was immediately capped. The vial was checked for air bubbles by inverting and gently tapping the vial. If any bubbles were visible, the vial was refilled and confirmed to be free of any air bubbles.
- All samples were labeled with the following information:
 

Sample ID	Date and Time Sample Collected
Location	Sampler's Initials
Project Number	
- Sample information was documented on a chain-of-custody form.
- All samples were placed in an ice chest, chilled with ice.
- Upon completion of the sampling activities, each well was closed and secured by replacing the well cap and securing the lock.

**5. Equipment Used:**

- Disposable gloves
- Potable water
- Alconox soap
- Scrub brushes
- Tools to open wells
- Keys to wells
- Water Level Data Form
- Well Sampling Data Sheet
- Chain-of-Custody Form
- Water level meter
- 3-inch electric submersible pump
- 1.75-inch positive displacement pump
- Ultrameter 6P
- YSI Model 55 DO Meter
- Turbidity Meter
- Disposable bailers (previously unused)
- Monofilament nylon line (50-lb test)
- Scissors
- Sample containers (preserved, as required) - provided by the laboratory
- Sample labels
- Ice chest
- Ice
- Labels / Indelible marker
- Trash bags
- 2,000-gallon storage tank
- Ziploc bags
- Nitrile Gloves

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**Appendix B**  
**Analytical Laboratory Report**



Report Date: August 30, 2005

Pon Xayasaeng  
Winzler & Kelly Consulting Engineers  
495 Tesconi Circle, Suite 9  
Santa Rosa, CA 95401-4696

## LABORATORY REPORT

Project Name: **Former Mead Clark Lumber**      **0242505001.32002**

Lab Project Number: **5081010**

This 26 page report of analytical data has been reviewed and approved for release.

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Mark A. Valentini, Ph.D.  
Laboratory Director



### TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31506	GW-16	TPH/Gasoline	ND	50

Date Sampled: 08/10/05	Date Analyzed: 08/15/05	QC Batch #: 5750
Date Received: 08/10/05	Method: EPA 5030/8015M	

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31507	GW-18	TPH/Gasoline	ND	50

Date Sampled: 08/10/05	Date Analyzed: 08/15/05	QC Batch #: 5750
Date Received: 08/10/05	Method: EPA 5030/8015M	

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31508	GW-31	TPH/Gasoline	ND	50

Date Sampled: 08/10/05	Date Analyzed: 08/15/05	QC Batch #: 5750
Date Received: 08/10/05	Method: EPA 5030/8015M	

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31509	GW-13A	TPH/Gasoline	ND	50

Date Sampled: 08/10/05	Date Analyzed: 08/15/05	QC Batch #: 5750
Date Received: 08/10/05	Method: EPA 5030/8015M	

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31510	DPE-7	TPH/Gasoline	1,200	50

Date Sampled: 08/10/05	Date Analyzed: 08/15/05	QC Batch #: 5750
Date Received: 08/10/05	Method: EPA 5030/8015M	



Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31511	DPE-5	TPH/Gasoline	2,000	50

Date Sampled:	08/10/05	Date Analyzed:	08/15/05	QC Batch #:	5750
Date Received:	08/10/05	Method:	EPA 5030/8015M		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31512	GW-1	TPH/Gasoline	7,800	500

Date Sampled:	08/10/05	Date Analyzed:	08/15/05	QC Batch #:	5750
Date Received:	08/10/05	Method:	EPA 5030/8015M		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31513	GW-37	TPH/Gasoline	4,600	100

Date Sampled:	08/10/05	Date Analyzed:	08/15/05	QC Batch #:	5750
Date Received:	08/10/05	Method:	EPA 5030/8015M		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31514	GW-12	TPH/Gasoline	7,100	100

Date Sampled:	08/10/05	Date Analyzed:	08/15/05	QC Batch #:	5750
Date Received:	08/10/05	Method:	EPA 5030/8015M		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31515	DPE-1	TPH/Gasoline	8,300	500

Date Sampled:	08/10/05	Date Analyzed:	08/15/05	QC Batch #:	5750
Date Received:	08/10/05	Method:	EPA 5030/8015M		



Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31516	GW-2	TPH/Gasoline	18,000	2,500

Date Sampled:	08/10/05	Date Analyzed:	08/17/05	QC Batch #:	5750
Date Received:	08/10/05	Method:	EPA 5030/8015M		

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Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
31517	DPE-9	TPH/Gasoline	16,000	1,000

Date Sampled:	08/10/05	Date Analyzed:	08/17/05	QC Batch #:	5750
Date Received:	08/10/05	Method:	EPA 5030/8015M		

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## Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31506	GW-16	benzene	ND	1.0
		toluene	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		o-xylene	ND	1.0

### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.1	95.5	70 – 130
toluene-d <sub>8</sub> (20)	19.8	99.0	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/11/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31507	GW-18	benzene	ND	1.0
		toluene	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		o-xylene	ND	1.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.0	100	70 – 130
toluene-d <sub>8</sub> (20)	19.8	99.0	70 – 130
4-bromofluorobenzene (20)	20.2	101	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/11/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31508	GW-31	benzene	ND (1)	1.0
		toluene	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		o-xylene	ND	1.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	2.0	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.6	98.0	70 – 130
toluene-d <sub>8</sub> (20)	20.0	100	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/11/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	

(1) The following additional compound was detected; 1,2-dichloroethane (6.4 ug/L).



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31509	GW-13A	benzene	ND	1.0
		toluene	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		o-xylene	ND	1.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.1	95.5	70 – 130
toluene-d <sub>8</sub> (20)	19.6	98.0	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/11/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31510	DPE-7	benzene	2.0	1.0
		toluene	ND	1.0
		ethyl benzene	3.7	1.0
		m,p-xylene	5.4	1.0
		o-xylene	ND	1.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	18.9	94.5	70 – 130
toluene-d <sub>8</sub> (20)	19.8	99.0	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/11/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31511	DPE-5	benzene	1.6	1.0
		toluene	ND	1.0
		ethyl benzene	8.7	1.0
		m,p-xylene	6.8	1.0
		o-xylene	ND	1.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	18.0	90.0	70 – 130
toluene-d <sub>8</sub> (20)	19.5	97.5	70 – 130
4-bromofluorobenzene (20)	19.9	99.5	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/12/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31512	GW-1	benzene	ND	5.0
		toluene	ND	5.0
		ethyl benzene	ND	5.0
		m,p-xylene	81	5.0
		o-xylene	18	5.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	120
methyl tert-butyl ether (MTBE)	ND	5.0
di-isopropyl ether (DIPE)	ND	5.0
ethyl tert-butyl ether (ETBE)	ND	5.0
tert-amyl methyl ether (TAME)	ND	5.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.5	97.5	70 – 130
toluene-d <sub>8</sub> (20)	20.0	100	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/12/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31513	GW-37	benzene	55	5.0
		toluene	ND	5.0
		ethyl benzene	54	5.0
		m,p-xylene	27	5.0
		o-xylene	ND	5.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	120
methyl tert-butyl ether (MTBE)	ND	5.0
di-isopropyl ether (DIPE)	ND	5.0
ethyl tert-butyl ether (ETBE)	ND	5.0
tert-amyl methyl ether (TAME)	ND	5.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	17.8	88.0	70 – 130
toluene-d <sub>8</sub> (20)	19.6	98.0	70 – 130
4-bromofluorobenzene (20)	19.7	98.5	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/12/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31514	GW-12	benzene	30	5.0
		toluene	ND	5.0
		ethyl benzene	27	5.0
		m,p-xylene	6.2	5.0
		o-xylene	ND	5.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	120
methyl tert-butyl ether (MTBE)	ND	5.0
di-isopropyl ether (DIPE)	ND	5.0
ethyl tert-butyl ether (ETBE)	ND	5.0
tert-amyl methyl ether (TAME)	ND	5.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	18.7	93.5	70 – 130
toluene-d <sub>8</sub> (20)	19.7	98.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/12/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31515	DPE-1	benzene	31	5.0
		toluene	ND	5.0
		ethyl benzene	47	5.0
		m,p-xylene	ND	5.0
		o-xylene	ND	5.0

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	120
methyl tert-butyl ether (MTBE)	ND	5.0
di-isopropyl ether (DIPE)	ND	5.0
ethyl tert-butyl ether (ETBE)	ND	5.0
tert-amyl methyl ether (TAME)	ND	5.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	18.4	92.0	70 – 130
toluene-d <sub>8</sub> (20)	20.0	100	70 – 130
4-bromofluorobenzene (20)	20.6	103	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/12/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31516	GW-2	benzene	ND	10
		toluene	ND	10
		ethyl benzene	150	10
		m,p-xylene	15	10
		o-xylene	ND	10

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	250
methyl tert-butyl ether (MTBE)	ND	10
di-isopropyl ether (DIPE)	ND	10
ethyl tert-butyl ether (ETBE)	ND	10
tert-amyl methyl ether (TAME)	ND	10

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	18.7	93.5	70 – 130
toluene-d <sub>8</sub> (20)	19.5	97.5	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/12/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
31517	DPE-9	benzene	24	10
		toluene	ND	10
		ethyl benzene	160	10
		m,p-xylene	150	10
		o-xylene	ND	10

#### Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	250
methyl tert-butyl ether (MTBE)	ND	10
di-isopropyl ether (DIPE)	ND	10
ethyl tert-butyl ether (ETBE)	ND	10
tert-amyl methyl ether (TAME)	ND	10

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.6	98.0	70 – 130
toluene-d <sub>8</sub> (20)	19.8	99.0	70 – 130
4-bromofluorobenzene (20)	23.9	120	70 – 130

Date Sampled: 08/10/05	Date Analyzed: 08/12/05, 08/16/05	QC Batch #: 5742
Date Received: 08/10/05	Method: EPA 8260B	



## Total Chromium in Water

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31510	DPE-7	Total Chromium	ND (2)	0.005

Date Sampled:	08/10/05	Date Analyzed:	08/12/05	QC Batch #:	5734
Date Received:	08/10/05	Method:	EPA 3010/6010		

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31511	DPE-5	Total Chromium	ND (2)	0.005

Date Sampled:	08/10/05	Date Analyzed:	08/12/05	QC Batch #:	5734
Date Received:	08/10/05	Method:	EPA 3010/6010		

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31515	DPE-1	Total Chromium	ND (2)	0.005

Date Sampled:	08/10/05	Date Analyzed:	08/12/05	QC Batch #:	5734
Date Received:	08/10/05	Method:	EPA 3010/6010		

(2) The result reported is for total chromium. The hexavalent chromium analysis was not performed within the recommended holding time of 24 hours. A total chromium analysis at a detection limit of 0.005 mg/L would indicate no hexavalent chromium was present above 0.005 mg/L.



Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31516	GW-2	Total Chromium	ND (2)	0.005

Date Sampled: 08/10/05      Date Analyzed: 08/12/05      QC Batch #: 5734  
Date Received: 08/10/05      Method: EPA 3010/6010

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31517	DPE-9	Total Chromium	ND (2)	0.005

Date Sampled: 08/10/05      Date Analyzed: 08/12/05      QC Batch #: 5734  
Date Received: 08/10/05      Method: EPA 3010/6010

(2) The result reported is for total chromium. The hexavalent chromium analysis was not performed within the recommended holding time of 24 hours. A total chromium analysis at a detection limit of 0.005 mg/L would indicate no hexavalent chromium was present above 0.005 mg/L.



## Bromate and Bromide in Water

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31510	DPE-7	Bromate ( $\text{BrO}_3^{-1}$ )	ND (3)	0.015
		Bromide ( $\text{Br}^{-1}$ )	0.17	0.020

Date Sampled:	08/10/05	Date Analyzed:	08/15/05	QC Batch #:	5749
Date Received:	08/10/05	Methods:	EPA 300 (IC)		

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31511	DPE-5	Bromate ( $\text{BrO}_3^{-1}$ )	ND	0.010
		Bromide ( $\text{Br}^{-1}$ )	0.23	0.020

Date Sampled:	08/10/05	Date Analyzed:	08/15/05	QC Batch #:	5749
Date Received:	08/10/05	Methods:	EPA 300 (IC)		

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31515	DPE-1	Bromate ( $\text{BrO}_3^{-1}$ )	ND (3)	0.015
		Bromide ( $\text{Br}^{-1}$ )	0.26	0.020

Date Sampled:	08/10/05	Date Analyzed:	08/15/05	QC Batch #:	5749
Date Received:	08/10/05	Methods:	EPA 300 (IC)		

(3) The sample required a dilution due to a sample matrix interference. The dilution resulted in a slight increase in the reported detection limit.



Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31516	GW-2	Bromate ( $\text{BrO}_3^{-1}$ )	ND (3)	0.015
		Bromide ( $\text{Br}^{-1}$ )	0.086	0.020

Date Sampled: 08/10/05	Date Analyzed: 08/15/05	QC Batch #: 5749
Date Received: 08/10/05	Methods: EPA 300 (IC)	

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31517	DPE-9	Bromate ( $\text{BrO}_3^{-1}$ )	ND (3)	0.015
		Bromide ( $\text{Br}^{-1}$ )	0.34	0.020

Date Sampled: 08/10/05	Date Analyzed: 08/15/05	QC Batch #: 5749
Date Received: 08/10/05	Methods: EPA 300 (IC)	

(3) The sample required a dilution due to a sample matrix interference. The dilution resulted in a slight increase in the reported detection limit.



## Dissolved Metals in Water

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31510	DPE-7	Vanadium (V)	ND	0.050
		Selenium (Se)	ND	0.005
		Molybdenum (Mo)	ND	0.050

Date Sampled: 08/10/05 Date Digested: 08/11/05 QC Batch #: 5734  
Date Received: 08/10/05 Date Analyzed: 08/11/05, 08/12/05  
Method: EPA 200.9 Zeeman GFF, EPA 3010/6010

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31511	DPE-5	Vanadium (V)	ND	0.050
		Selenium (Se)	ND	0.005
		Molybdenum (Mo)	ND	0.050

Date Sampled: 08/10/05 Date Digested: 08/11/05 QC Batch #: 5734  
Date Received: 08/10/05 Date Analyzed: 08/11/05, 08/12/05  
Method: EPA 200.9 Zeeman GFF, EPA 3010/6010

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31515	DPE-1	Vanadium (V)	ND	0.050
		Selenium (Se)	ND	0.005
		Molybdenum (Mo)	ND	0.050

Date Sampled: 08/10/05 Date Digested: 08/11/05 QC Batch #: 5734  
Date Received: 08/10/05 Date Analyzed: 08/11/05, 08/12/05  
Method: EPA 200.9 Zeeman GFF, EPA 3010/6010



Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31516	GW-2	Vanadium (V)	ND	0.050
		Selenium (Se)	ND	0.005
		Molybdenum (Mo)	ND	0.050

Date Sampled:	08/10/05	Date Digested:	08/11/05	QC Batch #:	5734
Date Received:	08/10/05	Date Analyzed:	08/11/05, 08/12/05		
Method:	EPA 200.9 Zeeman GFF, EPA 3010/6010				

Lab #	Sample ID	Analysis	Result (mg/L)	RDL (mg/L)
31517	DPE-9	Vanadium (V)	ND	0.050
		Selenium (Se)	ND	0.005
		Molybdenum (Mo)	ND	0.050

Date Sampled:	08/10/05	Date Digested:	08/11/05	QC Batch #:	5734
Date Received:	08/10/05	Date Analyzed:	08/11/05, 08/12/05		
Method:	EPA 200.9 Zeeman GFF, EPA 3010/6010				



# LABORATORY

## QUALITY ASSURANCE REPORT

QC Batch #: 5750

Lab Project #: 5081010

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
31480	CMS	TPH/Gas		NS	
	CMS	Benzene	9.85	10.0	98.5
	CMS	Toluene	10.2	10.0	102
	CMS	Ethyl Benzene	10.2	10.0	102
	CMS	Xylenes	31.6	30.0	105

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
31480	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.73	10.0	97.3	1.2
	CMSD	Toluene	10.0	10.0	100	1.5
	CMSD	Ethyl Benzene	10.1	10.0	101	0.93
	CMSD	Xylenes	31.3	30.0	104	0.95

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate  
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5742

Lab Project #: 5081010

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	19.3	96.5	70 – 130
toluene-d <sub>8</sub> (20)	19.9	99.5	70 – 130
4-bromofluorobenzene (20)	20.5	103	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
31506	CMS	1,1-dichloroethene	18.1	25.0	72.4
	CMS	benzene	23.4	25.0	93.6
	CMS	trichloroethene	24.8	25.0	99.2
	CMS	toluene	24.6	25.0	98.4
	CMS	chlorobenzene	25.9	25.0	104

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	18.4	92.0	70 – 130
toluene-d <sub>8</sub> (20)	19.7	98.5	70 – 130
4-bromofluorobenzene (20)	20.5	103	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
31506	CMSD	1,1-dichloroethene	19.0	25.0	76.0	4.9
	CMSD	benzene	23.6	25.0	94.4	0.85
	CMSD	trichloroethene	25.2	25.0	101	1.6
	CMSD	toluene	24.8	25.0	99.2	0.81
	CMSD	chlorobenzene	26.5	25.0	106	2.3

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	18.6	93.0	70 – 130
toluene-d <sub>8</sub> (20)	19.6	98.0	70 – 130
4-bromofluorobenzene (20)	20.2	101	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate  
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery

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QC Batch #: 5734

Lab Project #: 5081010

Sample ID	Compound	Result (mg/L)
MB	Vanadium (As)	ND
MB	Selenium (Se)	ND
MB	Molybdenum (Mo)	ND

Sample #	Sample ID	Compound	Result (mg/L)	Spike Level	% Recv.
31441	CMS	Vanadium (As)	0.490	0.500	98.0
	CMS	Selenium (Se)	0.459	0.500	91.8
	CMS	Molybdenum (Mo)	0.449	0.500	89.8

Sample #	Sample ID	Compound	Result (mg/L)	Spike Level	% Recv.	RPD
31441	CMSD	Vanadium (As)	0.492	0.500	98.4	0.41
	CMSD	Selenium (Se)	0.458	0.500	91.6	0.22
	CMSD	Molybdenum (Mo)	0.461	0.500	92.2	2.6

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate  
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery

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# Analytical Sciences

## CHAIN OF CUSTODY

Analytical Sciences  
P.O. Box 750336, Petaluma, CA 94975-0336  
110 Liberty Street, Petaluma, CA 94952  
(707) 769-3128  
Fax (707) 769-8093

**CLIENT INFORMATION**

COMPANY NAME:	WINZLER & KELLY CONSULTING ENGINEERS
ADDRESS:	495 TESCONI CIRCLE, SUITE 9
CONTACT:	Results: Sonja; Questions: Ron
PHONE#:	(707) 523-1010
FAX #:	(707) 527-8679

LAB PROJECT NUMBER: 5081010

WINZLER & KELLY PROJECT NAME: former land chart number

GLOBAL ID: T00009700540

COOLER TEMPERATURE: N  
GLOBAL ID: T00009700540

GEOTRACKER EDE: Y  
GLOBAL ID: T00009700540

COOLER TEMPERATURE

Blue Ice °C

COC

PAGE 1 OF 2

TURNAROUND TIME (Check one)

MOBILE LAB	24 HOURS
SAME DAY	72 HOURS
48 HOURS	
5 DAYS	NORMAL X

### ANALYSIS

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO	COMMENTS	LAB SAMPLE #
1	GW-16	8/10/05	10:20	W	4	YES X	X	1 set hex.
2	GW-18		10:46		4	YES X	X	chrome limit 31507
3	GW-31		10:59		4	YES X	X	1 < single
4	GW-13A		11:13		4	YES X	X	31509
5	DPE-7		11:19		3	Y/N X	X	1 set bronze 31510
6	DPE-5		11:21		3	Y/N X	X	1 set limit @ 2 days 31511
7	GW-1		11:36		4	YES X	X	31512
8	GW-37		11:49		4	YES X	X	1 for metals 31513
9	GW-12		13:10		4	YES X	X	Filter # F31514
10	DPE-1		11:58		3	Y/N X	X	in lab 31515
11	GW-2		13:13		3	Y/N X	X	31516

### SIGNATURES

RELINQUISHED BY:	<u>Ron Jayasena</u>	RECEIVED BY LABORATORY:	<u>J</u>
DATE	<u>8/10/05</u>	TIME	<u>13:40</u>

8/10/05 13:40

TIME

DATE

SIGNATURE

Ron Jayasena



# Analytical Sciences

## CHAIN OF CUSTODY

Analytical Sciences  
P.O. Box 750336, Petaluma, CA 94975-0336  
110 Liberty Street, Petaluma, CA 94952  
(707) 769-3128  
Fax (707) 769-8093



### CLIENT INFORMATION

COMPANY NAME: WINZLER & KELLY CONSULTING ENGINEERS  
ADDRESS: 495 TESCONI CIRCLE, SUITE 9  
SANTA ROSA, CA 95401-4696  
CONTACT: Rechts, Sonja; Questions: Rechts  
PHONE#: (707) 523-1010  
FAX #: (707) 527-8679

LAB PROJECT NUMBER: 5081010  
WINZLER & KELLY PROJECT NAME: Inner Head Clark lumber  
GLOBAL ID: D24250521.322022

TURNAROUND TIME (check one)	
MOBILE LAB	24 HOURS
SAME DAY	72 HOURS
48 HOURS	
5 DAYS	NORMAL
PAGE <u>2 of 2</u>	

ANALYSIS						
ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO
1	DPE-9	8/10/05	13:37W	X/N	1	X
2						X X at set hex 3/5/17 chrome limit
3						0.25ug/L
4						
5						* set barcode
6						limit < 10ug/L
7						
8						* for metals
9						filter & fix
10						in lab
11						

RELINQUISHED BY: <u>H. Longmire</u> SIGNATURE	SAMPLED BY: <u>Rechts, Sonja</u> DATE	RECEIVED BY LABORATORY: <u>J. J. J.</u> SIGNATURE
8/10/05 13:40		
TIME		
8/10/05 16:30		
DATE		
TIME		

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## **Appendix C**

## **GeoTracker Upload Verifications**

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### UPLOADING A GEO\_REPORT FILE

**YOUR DOCUMENT UPLOAD WAS SUCCESSFUL!**

**Facility Name:** MEAD CLARK LUMBER SUPPLY  
**Global ID:** T0609700540  
**Title:** Remedial System Installation and Startup Report  
**Document Type:** Reports - Other  
**Submittal Type:** GEO\_REPORT  
**Submittal Date/Time:** 9/9/2005 2:33:32 PM  
**Confirmation Number:** 9872525870

**[Click here to view the document.](#)**

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Logged in as WINZLER (AUTH\_RP)

[CONTACT SITE ADMINISTRATOR](#)

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### UPLOADING A GEO\_REPORT FILE

**YOUR DOCUMENT UPLOAD WAS SUCCESSFUL!**

**Facility Name:** MEAD CLARK LUMBER SUPPLY  
**Global ID:** T0609700540  
**Title:** Quarterly Groundwater Monitoring Report, 2nd Qtr 2005  
**Document Type:** Monitoring Report - Quarterly  
**Submittal Type:** GEO\_REPORT  
**Submittal Date/Time:** 8/19/2005 10:50:54 AM  
**Confirmation Number:** 4403335392

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## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### UPLOADING A GEO\_WELL FILE

Processing is complete. No errors were found!  
Your file has been successfully submitted!

**Submittal Title:** Well Measurement File, 3rd Qtr 2005, Former Mead Clark  
Lumber

**Submittal Date/Time:** 10/10/2005 11:35:47 AM

**Confirmation  
Number:** 6538136124

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## **Appendix D**

## **Operation and Maintenance Data**

### Operation and Maintenance Data

Former Mead Clark Lumber

Third and Railroad Street, Santa Rosa, Ca

Date	System Total Run Time (hours)	Ozone Readings			Hydrogen Peroxide Readings			Air Readings			
		Run Time Per Sparge Point (hours)	Injection Rate <sup>a</sup> (lb O <sub>3</sub> /day)	Injection Pressure (psi)	Flow Rate (SCFM)	Run Time Per Sparge Point (hours)	Injection Rate <sup>b</sup> (gpd)	Per Sparge Point (psi)	Run Time	Injection Pressure (psi)	Flow Rate (SCFM)
<b>System Installation and Start-up. H<sub>2</sub>O<sub>2</sub> was not started up but was tested for leaks using distilled water. Initial system readings was recorded.</b>											
06/02/05	1.1	1.1	0.5	19.0	0.24	1.9 <sup>c</sup>	OFF		2.0	30	1.0
06/08/05	117.5	NM	1.6	19.0	0.25	OFF	OFF		NM	30	1.4
06/15/05	770.1	95.9	NM	18.5	0.23	OFF	OFF		19.3	29	1.0
06/16/05	309.6	38.7	NM	17.5	0.27	OFF	OFF		40.2	30	1.0
07/19/05	<b>H<sub>2</sub>O<sub>2</sub> start-up. 7% H<sub>2</sub>O<sub>2</sub> is being injected.</b>										
	1105.7	137.3	NM	19.5	0.24	2.0		3.8	69.2	30	1.0
07/27/05	1298.0	161.1	1.6	21.0	0.25	4.7	3.8		81.0	34	1.0
08/10/05	<b>System off upon arrival. Ozone high pressure alarm turned system off at 6:09am on 7/29/05. Cleared alarm and turned system back on 8/10/05. Performed 2nd quarter 2005 QM event.</b>										
	1340.3	166.4	1.6	18.0	0.27	5.8		3.8	83.7	31	1.0
08/17/05	<b>Increased H<sub>2</sub>O<sub>2</sub> pump speed from 80 spm to 100 spm.</b>										
	1509.3	187.3	NM	18.0	0.25	9.6		4.8	94.1	32	1.0
09/07/05	<b>Disposable H<sub>2</sub>O<sub>2</sub> pump due to low H<sub>2</sub>O<sub>2</sub> levels in drum. Will turn H<sub>2</sub>O<sub>2</sub> back on once H<sub>2</sub>O<sub>2</sub> drum is refilled.</b>										
	2013.7	249.6	1.6	18.5	0.27	21.1	OFF		125.3	31	1.0
09/21/05	2350.1	291.1	1.6	18.0	0.26	24.6	OFF		146.0	30	1.0
10/06/05	<b>Enable H<sub>2</sub>O<sub>2</sub> pump after filling H<sub>2</sub>O<sub>2</sub> drum. Set pump speed to 80 spm.</b>										
	2710.3	335.6	1.6	18.0	0.25	32.8		3.8	168.3	30	1.0
10/20/05	3045.0	376.8	1.6	18.0	0.28	40.5		3.8	188.9	32	1.0

**Note:**

a = Calculated using the *Ozone Generation Curve* provided by Applied technology.

b = Calculated using the *Chemical Feed Pump Curve* provided by Applied technology.

c = Distilled water injected in sparge points, not H<sub>2</sub>O<sub>2</sub>.

lb O<sub>3</sub>/day = Pounds ozone per day

psi = Pounds square inch

SCFM = Standard cubic foot per minute

gpd = gallons per day

H<sub>2</sub>O<sub>2</sub> = Hydrogen peroxide

NM = Not measured

QM= Quarterly groundwater monitoring and sampling event

SPM = Strokes per minute